INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE.
CONSUMER: RETAIN THIS MANUAL FOR FUTURE REFERENCE.

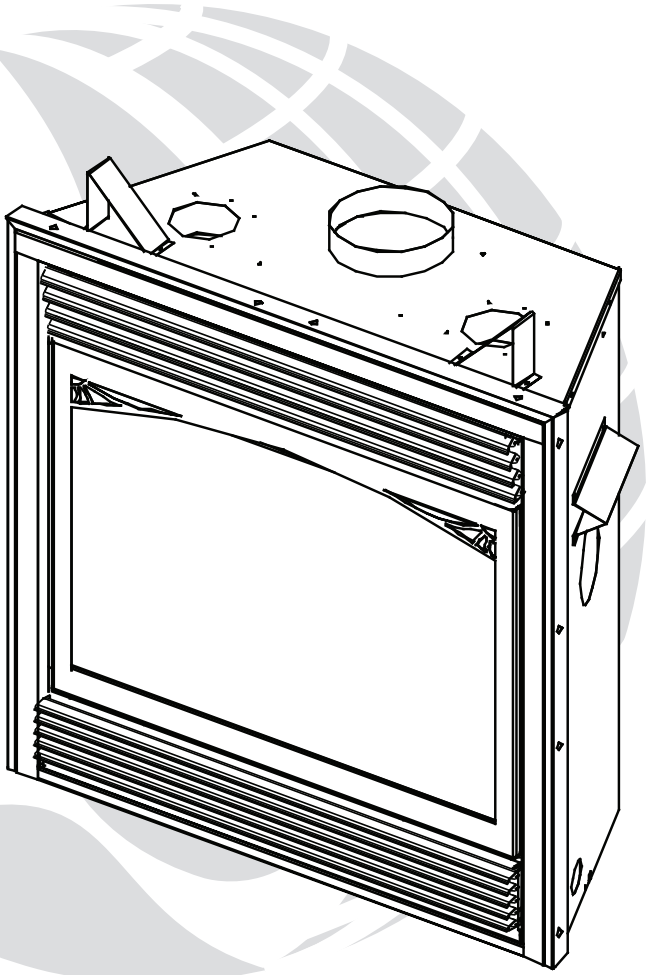
CONTINENTAL FIREPLACES

INSTALLATION AND OPERATING INSTRUCTIONS

CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS: CSA 2.33, ANSI Z21.88 FOR VENTED GAS FIREPLACE HEATERS.

CDV70NT-S
NATURAL GAS

CDV70PT-S
PROPANE



CERTIFIED FOR CANADA AND UNITED STATES USING ANSI/CSA METHODS.

SAFETY INFORMATION

⚠ WARNING

If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

- WHAT TO DO IF YOU SMELL GAS:

- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

- Installation and service must be performed by a qualified installer, service agency or the supplier.

HPBA Hearth, Patio & Barbecue Association

GO GREEN ECO-FRIENDLY TECHNOLOGY

Quality System Certified To ISO 9001-2008

c US Intertek

APPLY SERIAL NUMBER LABEL FROM CARTON

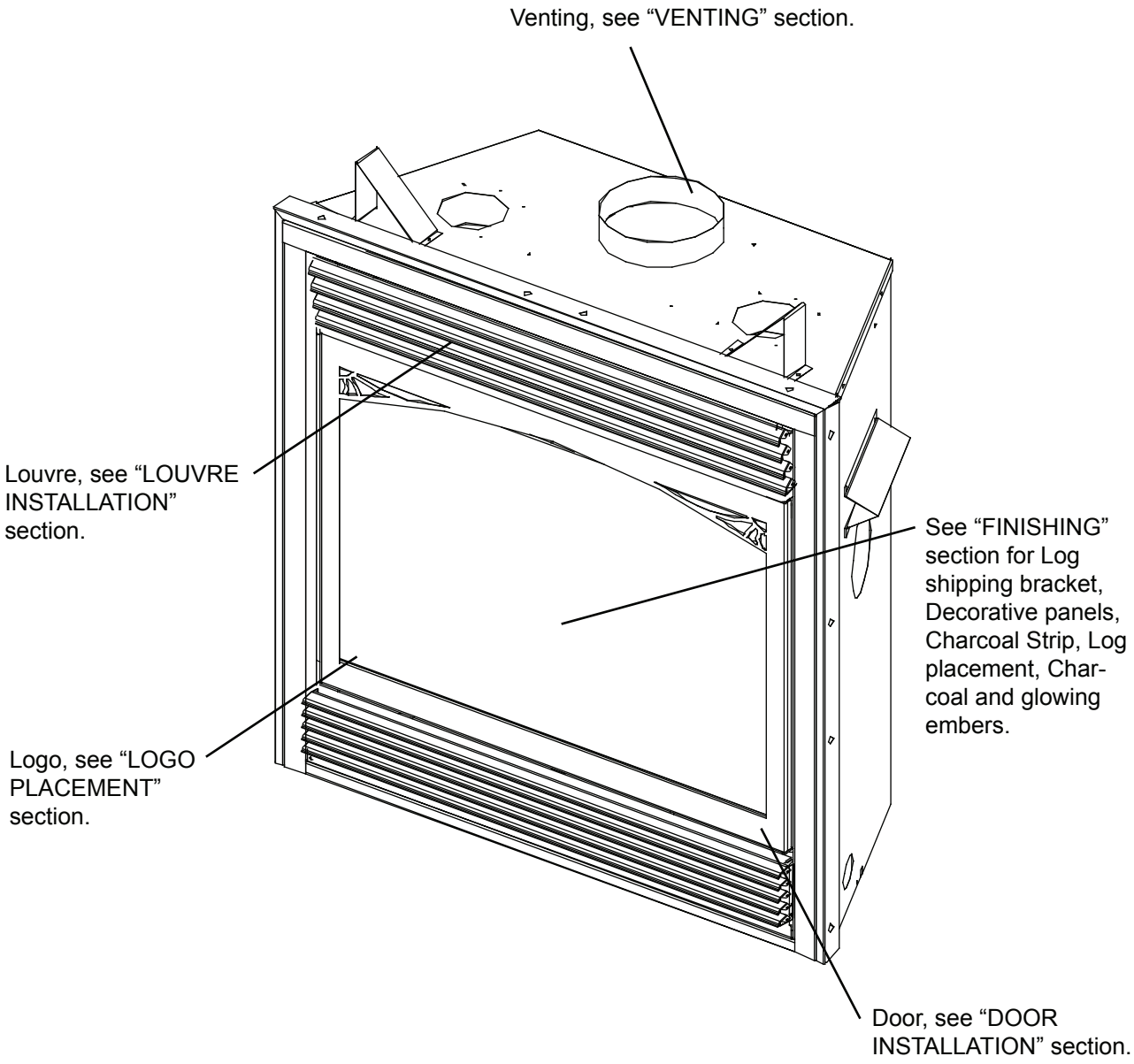
Serial No. XXXXXX000000
MODEL NO.

Wolf Steel Ltd., 24 Napoleon Rd., Barrie, ON, L4M 4Y8 Canada /
103 Miller Drive, Crittenden, Kentucky, USA, 41030
Phone (705)721-1212 • Fax (705)722-6031 • www.continentalfireplaces.com • ask@continentalfire.on.ca

TABLE OF CONTENTS

1.0	**INSTALLATION OVERVIEW**		**3**
2.0	**INTRODUCTION**		**4**
	2.1	DIMENSIONS	5
	2.2	GENERAL INSTRUCTIONS	5
	2.3	GENERAL INFORMATION	6
	2.4	RATING PLATE INFORMATION	7
	2.5	CARE OF GLASS	7
3.0	**VENTING**		**8**
	3.1	VENTING LENGTHS AND COMPONENTS	8
	3.2	TYPICAL VENT INSTALLATION	9
	3.3	SPECIAL VENT INSTALLATION	10
	3.3.1	PERISCOPE TERMINATION	10
	3.4	VENT TERMINAL CLEARANCES	11
	3.5	VENTING APPLICATION FLOW CHART	12
	3.6	DEFINITIONS	12
	3.7	ELBOW VENT LENGTH VALUES	12
	3.8	TOP EXIT HORIZONTAL TERMINATION	13
	3.9	VERTICAL TERMINATION	15
4.0	**INSTALLATION**		**17**
	4.1	WALL AND CEILING PROTECTION	17
	4.1.1	HORIZONTAL SHIELDING	18
	4.1.2	VERTICAL SHIELDING	18
	4.2	USING FLEXIBLE VENT COMPONENTS	19
	4.2.1	HORIZONTAL AIR TERMINAL INSTALLATION	19
	4.2.2	VERTICAL AIR TERMINAL INSTALLATION	20
	4.2.3	APPLIANCE VENT CONNECTION	21
	4.3	USING RIGID VENT COMPONENTS	21
	4.3.1	HORIZONTAL AIR TERMINAL INSTALLATION	21
	4.3.2	VERTICAL AIR TERMINAL INSTALLATION	22
	4.4	RESTRICTING VERTICAL VENTS	22
	4.5	GAS INSTALLATION	23
	4.6	OPTIONAL WALL SWITCH / THERMOSTAT	23
	4.7	MOBILE HOME INSTALLATION	24
5.0	**FRAMING**		**24**
	5.1	MINIMUM CLEARANCE TO COMBUSTIBLES	26
	5.2	PROTRUDING FINISH	27
	5.3	MINIMUM CLEARANCE TO COMBUSTIBLE ENCLOSURES	28
	5.4	MINIMUM MANTEL CLEARANCES	28
6.0	**FINISHING**		**29**
	6.1	DOOR INSTALLATION	29
	6.2	DOOR CLOSING AND OPENING	30
	6.3	LOG SHIPPING BRACKET	30
	6.4	DECORATIVE PANELS	30
	6.5	CHARCOAL STRIPS	30
	6.6	LOG PLACEMENT	30
	6.7	CHARCOAL EMBERS	32
	6.8	GLOWING EMBERS	32
	6.9	LOUVRE INSTALLATION	32
	6.10	LOGO PLACEMENT	32
7.0	**WIRING DIAGRAM / ELECTRICAL INFORMATION**		**33**
8.0	**OPERATION**		**34**
9.0	**ADJUSTMENTS**		**35**
	9.1	PILOT BURNER ADJUSTMENT	35
	9.2	VENTURI ADJUSTMENT	35
	9.3	FLAME CHARACTERISTICS	36
10.0	**MAINTENANCE**		**36**
	10.1	NIGHT LIGHT REPLACEMENT	37
	10.2	THERMAL SWITCH REPLACEMENT	37
	10.3	BLOWER REPLACEMENT	38
11.0	**REPLACEMENTS**		**39**
12.0	**TROUBLE SHOOTING**		**43**
13.0	**WARRANTY**		**45**
14.0	**SERVICE HISTORY**		**46**
15.0	**NOTES**		**47**

1.0 INSTALLATION OVERVIEW


Venting, see “VENTING” section.
Louvre, see “LOUVRE INSTALLATION” section.
See “FINISHING” section for Log shipping bracket, Decorative panels, Charcoal Strip, Log placement, Charcoal and glowing embers.
Logo, see “LOGO PLACEMENT” section.
Door, see “DOOR INSTALLATION” section.

2.0 INTRODUCTION

⚠ WARNING

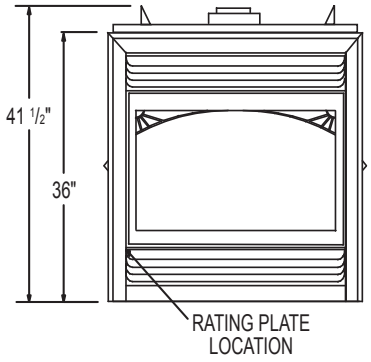
- **THIS APPLIANCE IS HOT WHEN OPERATED AND CAN CAUSE SEVERE BURNS IF CONTACTED.**
- Do not operate appliance before reading and understanding operating instructions. Failure to operate appliance according to operating instructions could cause fire or injury.
- Risk of fire or asphyxiation do not operate appliance with fixed glass removed.
- Do not connect 110 volts to the control valve.
- Risk of burns. The appliance should be turned off and cooled before servicing.
- Do not install damaged, incomplete or substitute components.
- Risk of cuts and abrasions. Wear protective gloves and safety glasses during installation. Sheet metal edges may be sharp.
- Do not burn wood or other materials in this appliance.
- Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to an appliance or stove, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.
- Clothing or other flammable material should not be placed on or near the appliance.
- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- Ensure you have incorporated adequate safety measure to protect infants/toddlers from touching hot surfaces.
- Even after the appliance is out, the glass and/or screen will remain hot for an extended period of time.
- Check with your local hearth specialty dealer for safety screens and hearth guards to protect children from hot surfaces. These screens and guards must be fastened to the floor.
- Any safety screen or guard removed for servicing must be replaced prior to operating the appliance.
- It is imperative that the control compartments, burners and circulating blower and its passageway in the appliance and venting system are kept clean. The appliance and its venting system should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- Under no circumstances should this appliance be modified.
- This appliance must not be connected to a chimney flue pipe serving a separate solid fuel burning appliance.
- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.
- Do not operate the appliance with the glass door removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.
- Do not strike or slam shut the appliance glass door.
- This appliance uses and requires a fast acting thermocouple. Replace only with a fast acting thermocouple supplied by Wolf Steel Ltd.
- Pressure relief doors must be kept closed while the appliance is operating to prevent exhaust fumes containing carbon monoxide, from entering into the home. Temperatures of the exhaust escaping through these openings can also cause the surrounding combustible materials to overheat and catch fire.
- Only doors / optional fronts certified with the unit are to be installed on the appliance.
- Keep the packaging material out of reach of children and dispose of the material in a safe manner. As with all plastic bags, these are not toys and should be kept away from children and infants.
- As with any combustion appliance, we recommend having your appliance regularly inspected and serviced as well as having a Carbon Monoxide Detector installed in the same area to defend you and your family against Carbon Monoxide.

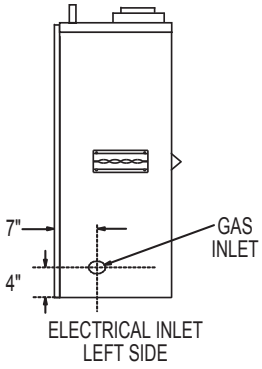
3.1

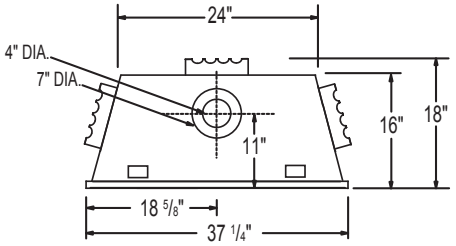
2.1 DIMENSIONS

⚠ WARNING

THE DOOR FOR THIS APPLIANCE IS SOLD SEPARATELY. THE DOOR MUST BE INSTALLED AND CLOSED BEFORE OPERATION BEGINS. SEE "DOOR INSTALLATION" SECTION FOR FURTHER DETAILS.







2.2 GENERAL INSTRUCTIONS

⚠ WARNING

ALWAYS LIGHT THE PILOT WHETHER FOR THE FIRST TIME OR IF THE GAS SUPPLY HAS RAN OUT, WITH THE GLASS DOOR OPENED OR REMOVED.

PROVIDE ADEQUATE CLEARANCE FOR SERVICING AND OPERATING THE APPLIANCE.

PROVIDE ADEQUATE VENTILATION.

NEVER OBSTRUCT THE FRONT OPENING OF THE APPLIANCE.

OBJECTS PLACED IN FRONT OF THE APPLIANCE MUST BE KEPT A MINIMUM OF 48" FROM THE FRONT FACE OF THE UNIT.

FIRE RISK. EXPLOSION HAZARD.

HIGH PRESSURE WILL DAMAGE VALVE. DISCONNECT GAS SUPPLY PIPING BEFORE PRESSURE TESTING GAS LINE AT TEST PRESSURES ABOVE 1/2 PSIG. CLOSE THE MANUAL SHUT-OFF VALVE BEFORE PRESSURE TESTING GAS LINE AT TEST PRESSURES EQUAL TO OR LESS THAN 1/2 PSIG.

USE ONLY WOLF STEEL APPROVED OPTIONAL ACCESSORIES AND REPLACEMENT PARTS WITH THIS APPLIANCE. USING NON-LISTED ACCESSORIES (BLOWERS, DOORS, LOUVRES, TRIMS, GAS COMPONENTS, VENTING COMPONENTS, ETC.) COULD RESULT IN A SAFETY HAZARD AND WILL VOID THE WARRANTY AND CERTIFICATION.

THIS GAS APPLIANCE SHOULD BE INSTALLED AND SERVICED BY A QUALIFIED INSTALLER to conform with local codes. Installation practices vary from region to region and it is important to know the specifics that apply to your area, for example in Massachusetts State:

- This product must be installed by a licensed plumber or gas fitter when installed within the commonwealth of Massachusetts.
- The appliance damper must be removed or welded in the open position prior to installation of a appliance insert or gas log.
- The appliance off valve must be a "T" handle gas cock.
- The flexible connector must not be longer than 36 inches.
- A Carbon Monoxide detector is required in all rooms containing gas fired appliances.
- The appliance is not approved for installation in a bedroom or bathroom unless the unit is a direct vent sealed combustion product.

The installation must conform with local codes or, in absence of local codes, the National Gas and Propane Installation Code CSA B149.1 in Canada, or the National Fuel Gas Code, ANSI Z223.1 / NFPA 54 in the United States. Suitable for mobile home installation if installed in accordance with the current standard CAN/CSA Z240MH Series, for gas equipped mobile homes, in Canada or ANSI Z223.1 and NFPA 54 in the United States.

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED www.nficertified.org

We suggest that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists

As long as the required clearance to combustibles is maintained, the most desirable and beneficial location for an appliance is in the center of a building, thereby allowing the most efficient use of the heat created. The location of windows, doors and the traffic flow in the room where the appliance is to be located should be considered. If possible, you should choose a location where the vent will pass through the house without cutting a floor or roof joist.

If the appliance is installed directly on carpeting, vinyl tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth.

If the optional fan or blower is installed, the junction box must be electrically connected and grounded in accordance with local codes, use the current CSA C22.1 Canadian Electrical Code in Canada or the ANSI/ NFPA 70 National Electrical code in the United States.

4.1

2.3 GENERAL INFORMATION

FOR YOUR SATISFACTION, THIS APPLIANCE HAS BEEN TEST-FIRED TO ASSURE ITS OPERATION AND QUALITY!

CDV70		
	NG	**LP**
Altitude (FT)	0-4,500	0-4500
Max. Input (BTU/HR)	35,000	33,000
Max. Output (BTU/HR)	28,350	26,400
Efficiency (w/the fan on)	81%	80%
A.F.U.E.	64%	65%
Min. Inlet Gas Supply Pressure	4.5" Water Column	11" Water Column
Max. Inlet Gas Supply Pressure	7" Water Column	13" Water Column
Manifold Pressure (Under Flow Conditions)	3.5" Water Column	10" Water Column

When the appliance is installed at elevations above 4,500ft, and in the absence of specific recommendations from the local authority having jurisdiction, the certified high altitude input rating shall be reduced at the rate of 4% for each additional 1,000ft.

No external electricity (110 volts or 24 volts) is required for the gas system operation.

Expansion / contraction noises during heating up and cooling down cycles are normal and are to be expected. Change in flame appearance from “HI” to “LO” is more evident in natural gas than in propane.

8” is the minimum bend radius allowed for the 7” diameter flexible air liner.

2.4 RATING PLATE INFORMATION

CERTIFIED UNDER / HOMOLOGUÉ SELON LES NORMES: CSA 2.33-2009, ANSI Z21.88-2009 VENTED GAS FIREPLACE HEATER / APPAREIL DE CHAUFFAGE ALIMENTÉ AU GAZ ET VENTILÉ

VENTED GAS FIREPLACE HEATER. APPROVED FOR BEDROOM, BATHROOM AND BED-SITTING ROOM INSTALLATION. SUITABLE FOR MOBILE HOME INSTALLATION IF INSTALLED IN ACCORDANCE WITH THE CURRENT STANDARD CAN/CSA Z240MH SERIES GAS EQUIPPED MOBILE HOMES, IN CANADA OR IN THE UNITED STATES THE MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARD, TITLE 24 CFR, PART 3280. WHEN THIS US STANDARD IS NOT APPLICABLE USE THE STANDARD FOR FIRE SAFETY CRITERIA FOR MANUFACTURED HOME INSTALLATIONS, SITES AND COMMUNITIES, ANSI / NFPA 501A.

C US Intertek

REFERENCE # W/N 15525

FOYER DE CHAUFFAGE AU GAZ AVEC ÉVACUATION. HOMOLOGUÉ POUR INSTALLATION DANS UNE CHAMBRE À COUCHER, UNE SALLE DE BAIN ET UN STUDIO. APPROPRIÉ POUR INSTALLATION DANS UNE MAISON MOBILE SI SON INSTALLATION CONFORME AUX EXIGENCES DE LA NORME CAN/CSA Z240MH SÉRIE DE MAISONS MOBILES ÉQUIPPÉES AU GAZ, EN VIGUEUR AU CANADA OU AUX ÉTATS-UNIS DE LA NORME DE SÉCURITÉ ET DE CONSTRUCTION DE MAISONS MANUFACTURÉES, TITRE 24 CFR, SECTION 3280. DANS LE CAS OU CETTE NORME D'ÉTATS-UNIS NE PEUT ÊTRE APPLIQUÉE, SE RÉFÉRER À LA NORME RELATIVE AU CRITÈRE DE MESURES DE SÉCURITÉ CONTRE L'INCENDIE POUR LES INSTALLATIONS DANS LES MAISONS MANUFACTURÉS, LES SITES ET LES COMMUNAUTÉS, ANSI/NFPA 501A.

	CERTIFIED FOR CANADA AND US / CERTIFIEE POUR CANADA ET US	
MODEL		**MODEL**
☐ GD70-N / CDV70N		☐ GD70-P / CDV70P
0-4500FT (0-1370m)	ALTITUDE / ÉLÉVATION	0-4500FT (0-1370m)
35,000 BTU/h	INPUT / ALIMENTATION	33,000 BTU/h
23,000 BTU/h	REDUCED INPUT / ALIMENTATION RÉDUITE	23,000 BTU/h
24,500 BTU/h	OUTPUT / RENDEMENT	23,400 BTU/h
#35	ORIFICE / INJECTEUR	#50
3.5" WATER COLUMN/D'UNE COLONNE D'EAU	MANIFOLD PRESSURE / PRESSION AU COLLECTEUR	10" WATER COLUMN/D'UNE COLONNE D'EAU
4.5" WATER COLUMN/D'UNE COLONNE D'EAU	MINIMUM SUPPLY PRESSURE / PRESSION D'ALIMENTATION MINIMALE	11" WATER COLUMN/D'UNE COLONNE D'EAU
7.0" WATER COLUMN/D'UNE COLONNE D'EAU	MAXIMUM SUPPLY PRESSURE / PRESSION D'ALIMENTATION MAXIMALE	13" WATER COLUMN/D'UNE COLONNE D'EAU
70% FAN OFF/VENTILATEUR ARRÊTÉ	STEADY STATE EFFICIENCY / EFFICACITÉ CONSTANTE	71% FAN OFF/VENTILATEUR ARRÊTÉ
70% FAN ON/VENTILATEUR FONCTIONNE		71% FAN ON/VENTILATEUR FONCTIONNE
64%	AFUE	65%

NOT FOR USE WITH SOLID FUEL. FOR USE WITH GLASS DOORS CERTIFIED WITH THIS UNIT ONLY.

WARNING: DO NOT ADD ANY MATERIAL TO THE APPLIANCE, WHICH WILL COME IN CONTACT WITH THE FLAMES, OTHER THAN THAT SUPPLIED BY THE MANUFACTURER WITH THE APPLIANCE.

MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS/
DÉGAGEMENTS MINIMAUX DES MATÉRIAUX COMBUSTIBLES:

TOP/DESSUS	0	RECESSED DEPTH/PROFONDEUR D'ENCASTRÉ	18"
FLOOR/PLANCHER	0	VENT / ÉVENT	2"
SIDES/CÔTÉS	0	MANTLE/MANTEAU	2" *
BACK/ARRIÈRE	0		

TOP, SIDES & BACK: PER STAND OFF SPACERS FOR FRAMING MATERIALS. FOR FINISHING MATERIALS SEE OWNERS MANUAL / DESSUS, CÔTÉS & ARRIÈRE: SELON LES ESPACEURS DE DÉGAGEMENT POUR LES MATÉRIAUX D'OSSATURE SELON LE MANUEL DE PROPRIÉTAIRE POUR LES MATÉRIAUX DE FINITION.

* MAXIMUM HORIZONTAL EXTENSION / L'EXTENSION HORIZONTALE MAXIMALE: 2". SEE INSTRUCTION MANUAL FOR GREATER EXTENSIONS. RÉFÉRER AU MANUEL D'INSTRUCTION POUR DES EXTENSIONS PLUS GRANDES.

SEE OWNER'S INSTRUCTION MANUAL FOR MINIMUM AND MAXIMUM VENT LENGTHS.
RÉFÉRER AU MANUEL D'INSTALLATION DE PROPRIÉTAIRE POUR LES LONGUEURS D'ÉVACUATION MINIMALE ET MAXIMALE.

UN COMBUSTIBLE SOLIDE NE DOIT PAS ÊTRE UTILISÉ AVEC CET APPAREIL. UTILISER AVEC LES PORTES VITRÉES HOMOLOGUÉES SEULEMENT AVEC CETTE UNITÉ.

AVERTISSEMENT: N'AJOUTEZ PAS À CET APPAREIL AUCUN MATÉRIAU DEVANT ENTRER EN CONTACT AVEC LES FLAMMES AUTRE QUE CELUI QUI EST FOURNI AVEC CET APPAREIL PAR LE FABRICANT.

THE APPLIANCE MUST BE VENTED USING THE APPROPRIATE NAPOLEON VENT KITS. SEE OWNERS INSTALLATION MANUAL FOR VENTING SPECIFICS. PROPER REINSTALLATION AND RESEALING IS NECESSARY AFTER SERVICING THE VENT-AIR INTAKE SYSTEM.

L'APPAREIL DOIT ÉVACUER SES GAZ EN UTILISANT L'ENSEMBLE D'ÉVACUATION PROPRE À NAPOLEON. RÉFÉRER AU MANUEL D'INSTALLATION DE PROPRIÉTAIRE POUR L'ÉVACUATION PRÉCISE. IL EST IMPORTANT DE BIEN RÉINSTALLER ET RESCELLER L'ÉVENT APRÈS AVOIR ASSURÉ LE MAINTIEN DU SYSTÈME DE PRISE D'AIR.

ELECTRICAL RATING / CLASSIFICATION: 115V 0.82AMPS, 60HZ

OPTIONAL FAN KIT / ENSEMBLE DE VENTILATEUR FACULTATIF: GZ550-KT, GD65

MADE IN CANADA / FABRIQUÉ AU CANADA

WOLF STEEL LTD. BARRIE, ONTARIO CANADA

SERIAL NUMBER / NO. DE SÉRIE: GD70

W385-0290 / F

<u>INSTALLER:</u> It is your responsibility to check off the appropriate box on the rating plate according to the model, venting and gas type of the appliance.

For rating plate location, see "DIMENSIONS" section.

2.5 CARE OF GLASS

DO NOT CLEAN GLASS WHEN HOT! DO NOT USE ABRASIVE CLEANERS TO CLEAN GLASS.

Buff lightly with a clean dry soft cloth. Clean both sides of the glass after the first 10 hours of operation with a recommended fireplace glass cleaner. Thereafter clean as required. If the glass is not kept clean permanent discoloration and / or blemishes may result.

3.0 VENTING

⚠ WARNING

RISK OF FIRE, MAINTAIN SPECIFIED AIR SPACE CLEARANCES TO VENT PIPE AND APPLIANCE.

IF VENTING IS INCLUDED WITH SPACERS THE VENT SYSTEM MUST BE SUPPORTED EVERY 3 FEET FOR BOTH VERTICAL AND HORIZONTAL RUNS. USE SUPPORTS OR EQUIVALENT NON-COMBUSTIBLE STRAPPING TO MAINTAIN THE REQUIRED CLEARANCE FROM COMBUSTIBLES. USE WOLF STEEL LTD. SUPPORT RING ASSEMBLY W010-0370 OR EQUIVALENT NON-COMBUSTIBLE STRAPPING TO MAINTAIN THE MINIMUM CLEARANCE TO COMBUSTIBLES FOR BOTH VERTICAL AND HORIZONTAL RUNS. SPACERS ARE ATTACHED TO THE INNER PIPE AT PREDETERMINED INTERVALS TO MAINTAIN AN EVEN AIR GAP TO THE OUTER PIPE. THIS GAP IS REQUIRED FOR SAFE OPERATION. A SPACER IS REQUIRED AT THE START, MIDDLE AND END OF EACH ELBOW TO ENSURE THIS GAP IS MAINTAINED. THESE SPACERS MUST NOT BE REMOVED.

THIS APPLIANCE USES A 4" EXHAUST / 7" AIR INTAKE VENT PIPE SYSTEM.
Refer to the section applicable to your installation.

For safe and proper operation of the appliance follow the venting instruction exactly. Deviation from the minimum vertical vent length can create difficulty in burner start-up and/or carboning. Under extreme vent configurations, allow several minutes (5-15) for the flame to stabilize after ignition. Vent lengths that pass through unheated spaces (attics, garages, crawl spaces) should be insulated with the insulation wrapped in a protective sleeve to minimize condensation. Provide a means for visually checking the vent connection to the appliance after the appliance is installed. Use a firestop, vent pipe shield or attic insulation shield when penetrating interior walls, floor or ceiling.
NOTE: If for any reason the vent air intake system is disassembled; reinstall per the instructions provided for the initial installation.

7.1

3.1 VENTING LENGTHS AND COMPONENTS

Use only Wolf Steel, Simpson Dura-Vent, Selkirk Direct Temp, American Metal Amerivent or Metal-Fab venting components. Minimum and maximum vent lengths, for both horizontal and vertical installations, and air terminal locations for either system are set out in this manual and must be adhered to. For Simpson Dura-Vent, Selkirk Direct Temp, American Metal Amerivent and Metal-Fab follow the installation procedure provided with the venting components.

A starter adaptor must be used with the following vent systems and may be purchased from the corresponding supplier:

PART	4"/7"	SUPPLIER	WEBSITE
Duravent	W175-0053	Wolf Steel	www.duravent.com
Amerivent	4DSC-N2	American Metal	www.americanmetalproducts.com
Direct Temp	4DT-AAN	Selkirk	www.selkirkcorp.com
SuperSeal	4DNA	Metal-Fab	www.mtlfab.com

For Simpson Dura-Vent, Selkirk Direct Temp, American Metal Amerivent and Metal-Fab follow the installation procedure found on the website for your venting supplier.

For vent systems that provide seals on the inner exhaust flue, only the outer air intake joints must be sealed using a red high temperature silicone (RTV). This same sealant may be used on both the inner exhaust and outer intake vent pipe joints of all other approved vent systems except for the exhaust vent pipe connection to the appliance flue collar which must be sealed using the black high temperature sealant Mill Pac. High temperature sealant must be ordered separately.

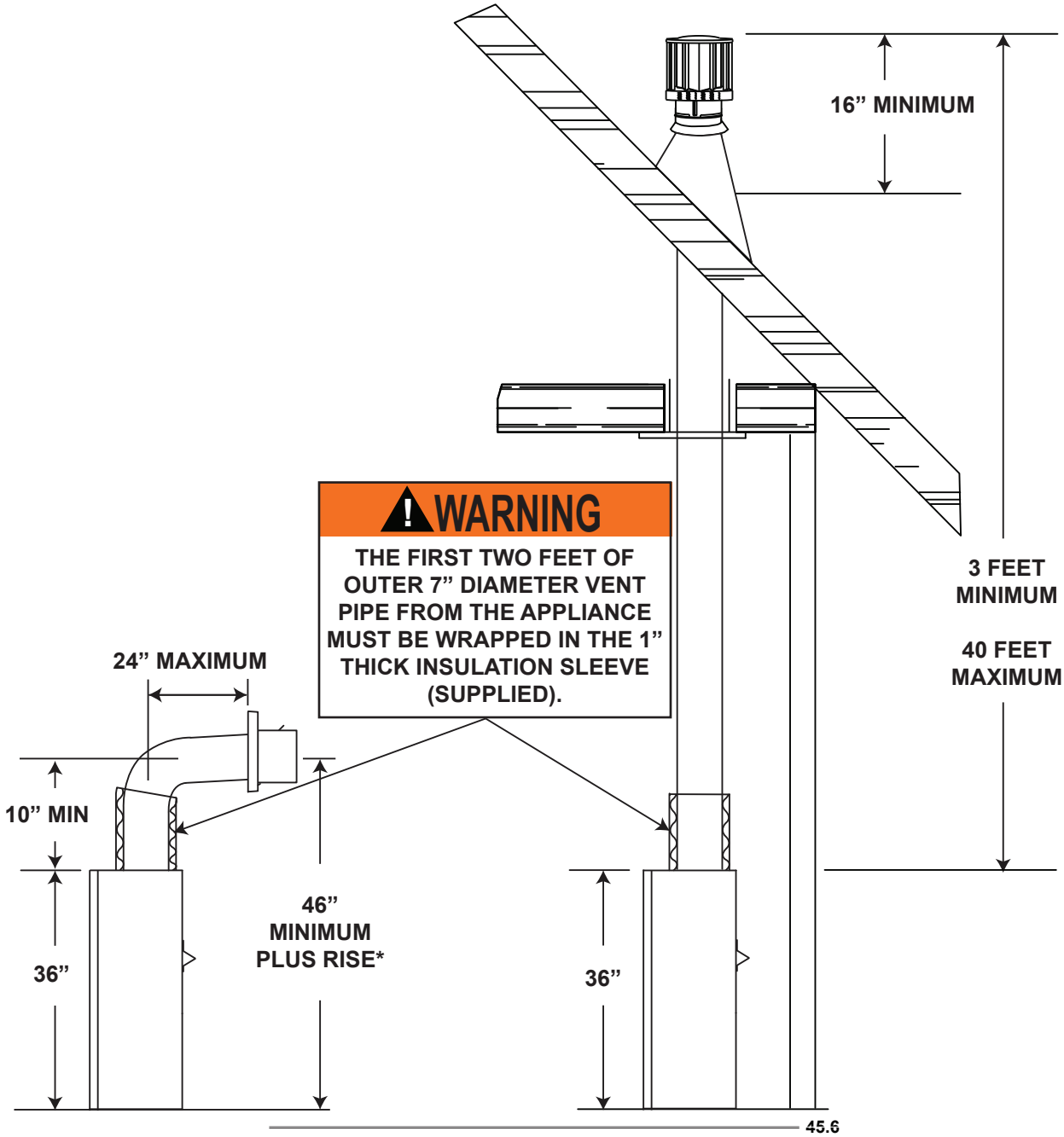
When using Wolf Steel venting components, use only approved Wolf Steel rigid / flexible components with the following termination kits: wall terminal kit **GD222**, **GD222R**, or 1/12 to 7/12 pitch roof terminal kit **GD110**, 8/12 to 12/12 roof terminal kit **GD111**, flat roof terminal kit **GD112** or periscope kit **GD201** (for wall penetration below grade). With flexible venting, in conjunction with the various terminations, use either the 5 foot vent kit **GD220** or the 10 foot vent kit **GD330**.

For optimum flame appearance and appliance performance, keep the vent length and number of elbows to a minimum. The air terminal must remain unobstructed at all times. Examine the air terminal at least once a year to verify that it is unobstructed and undamaged.
Rigid and flexible venting systems must not be combined. Different venting manufacturer components must not be combined.

These vent kits allow for either horizontal or vertical venting of the appliance. The maximum allowable horizontal run is 20 feet. The maximum allowable vertical vent length is 40 feet. The maximum number of vent connections is two horizontally or three vertically (excluding the appliance and the air terminal connections) when using flexible venting.

8.1

3.2 TYPICAL VENT INSTALLATION


16” MINIMUM
WARNING
THE FIRST TWO FEET OF OUTER 7” DIAMETER VENT PIPE FROM THE APPLIANCE MUST BE WRAPPED IN THE 1” THICK INSULATION SLEEVE (SUPPLIED).
3 FEET MINIMUM
40 FEET MAXIMUM
24” MAXIMUM
10” MIN
36”
46” MINIMUM PLUS RISE*
36”

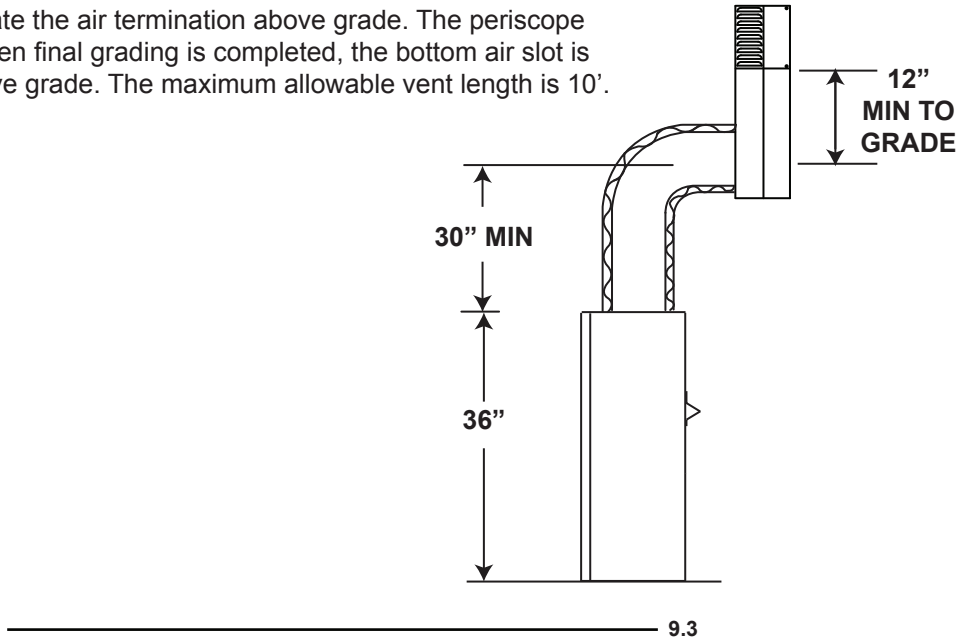
45.6

*** See “VENTING” section**
Horizontal runs may have a 0” rise per foot in all cases using Simpon Dura-vent or Napoleon rigid or flexible venting components when venting as illustrated.
For optimum performance, it is recommended that all horizontal runs have a 1” rise per foot. When terminating vertically, the vertical rise is a minimum 36” and a maximum 40 ft from the center of the appliance flue outlet.

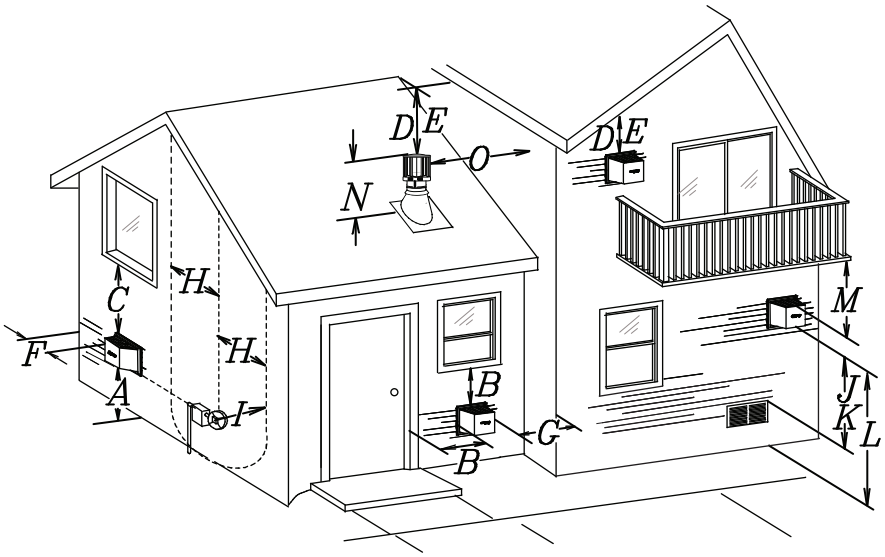
3.3 SPECIAL VENT INSTALLATION

3.3.1 PERISCOPE TERMINATION

Use the periscope kit to locate the air termination above grade. The periscope must be installed so that when final grading is completed, the bottom air slot is located a minimum 12” above grade. The maximum allowable vent length is 10’.



3.4 VENT TERMINAL CLEARANCES



	INSTALLATIONS		
	CANADA	U.S.A.	
A	12”	12”	Clearance above grade, veranda porch, deck or balcony.
B	12”	9”	Clearance to windows or doors that open.
C	12” *	12” *	Clearance to permanently closed windows.
D	18” **	18” **	Vertical clearance to ventilated soffits located above the terminal within a horizontal distance of 2’ from the centerline of the terminal.
E	12” **	12” **	Clearance to unventilated soffit.
F	0”	0”	Clearance to an outside corner wall.
G	0” ***	0” ***	Clearance to an inside **non**-combustible corner wall or protruding **non**-combustible obstructions (chimney, etc.).
	2” ***	2” ***	Clearance to an inside combustible corner wall or protruding combustible obstructions (vent chase, etc.).
H	3’	3’ ****	Clearance to each side of the centerline extended above the meter / regulator assembly to a maximum vertical distance of 15’.
I	3’	3’ ****	Clearance to a service regulator vent outlet.
J	12”	9”	Clearance to a non-mechanical air supply inlet to the building or a combustion air inlet to any other appliance.
K	6’	3’ †	Clearance to a mechanical air supply inlet.
L	7’ ‡	7’ ****	Clearance above a paved sidewalk or paved driveway located on public property.
M	12” ††	12” ****	Clearance under a veranda, porch, deck or balcony.
N	16”	16”	Clearance above the roof.
O	2’ †*	2’ †*	Clearance from an adjacent wall including neighbouring buildings.

* Recommended to prevent condensation on windows and thermal breakage

** it is recommended to use a heat shield and to maximize the distance to vinyl clad soffits.

*** The periscope requires a minimum 18 inches clearance from an inside corner.

**** This is a recommended distance. For additional requirements check local codes.

† 3 feet above if within 10 feet horizontally.

‡ A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.

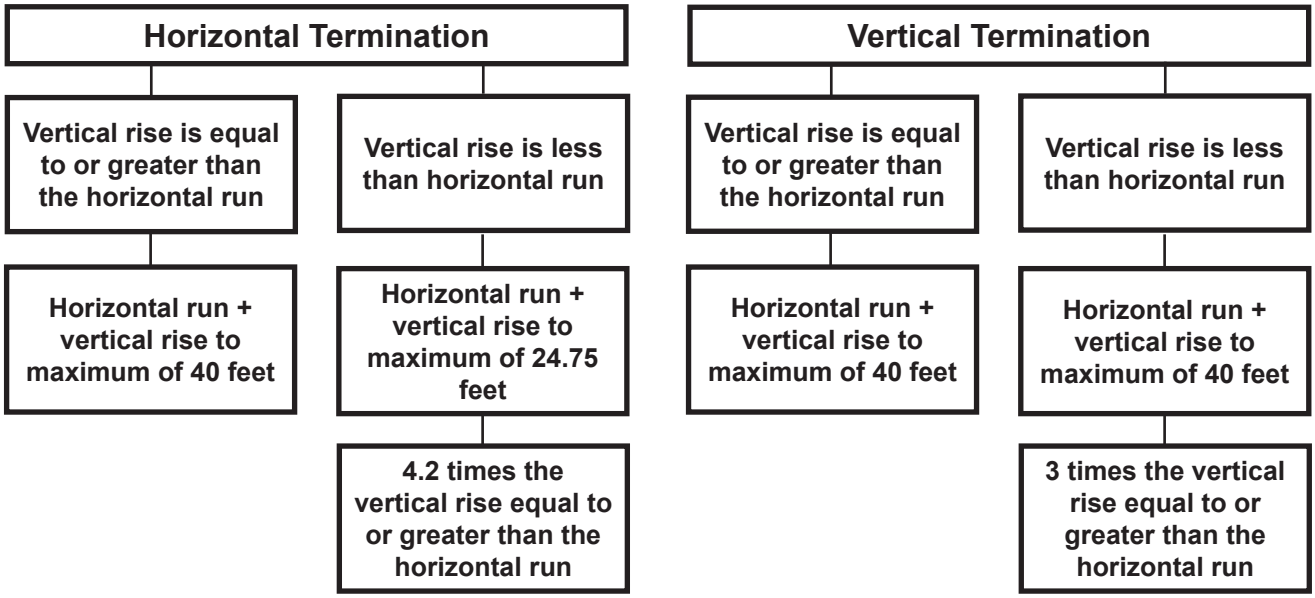
†† Permitted only if the veranda, porch, or deck is fully open on a minimum of two sides beneath the floor.

†* Recommended to prevent recirculation of exhaust products. For additional requirements check local codes.

NOTE: Clearances are in accordance with local installation codes and the requirements of the gas supplier.

12.1

3.5 VENTING APPLICATION FLOW CHART


Horizontal Termination
Vertical rise is equal to or greater than the horizontal run
Horizontal run + vertical rise to maximum of 40 feet
Vertical rise is less than horizontal run
Horizontal run + vertical rise to maximum of 24.75 feet
4.2 times the vertical rise equal to or greater than the horizontal run
Vertical Termination
Vertical rise is equal to or greater than the horizontal run
Horizontal run + vertical rise to maximum of 40 feet
Vertical rise is less than horizontal run
Horizontal run + vertical rise to maximum of 40 feet
3 times the vertical rise equal to or greater than the horizontal run

13.1

3.6 DEFINITIONS

For the following symbols used in the venting calculations and examples are:
> - greater than
≥ - equal to or greater than
< - less than
≤ - equal to or less than
H_T - total of both horizontal vent lengths (Hr) and offsets (Ho) in feet
H_R - combined horizontal vent lengths in feet
H_O - offset factor: .03 (total degrees of offset - 90°*) in feet
V_T - combined vertical vent lengths in feet

14.1

3.7 ELBOW VENT LENGTH VALUES

	FEET	INCHES
1°	0.03	0.5
15°	0.45	6.0
30°	0.9	11.0
45°	1.35	16.0
90°*	2.7	32.0

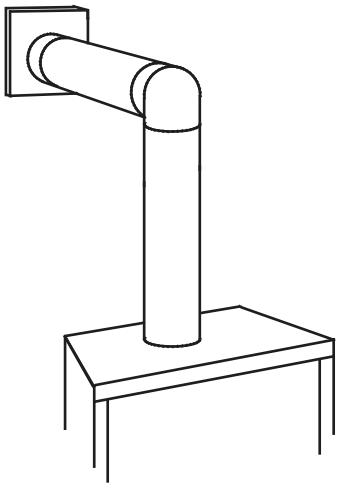
* The first 90° offset has a zero value and is shown in the formula as - 90°

15.1

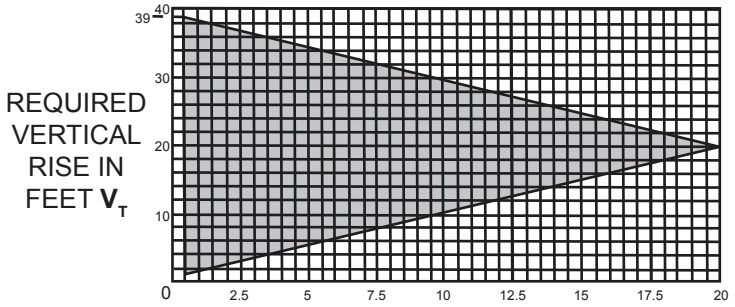
3.8 TOP EXIT HORIZONTAL TERMINATION

(H_T) ≤ (V_T)

Simple venting configuration (only one 90° elbow)



See graph to determine the required vertical rise V_T for the required horizontal run H_T.



The shaded area within the lines represents acceptable values for H_T and V_T

For vent configurations requiring more than one 90° elbow, the following formulas apply:

Formula 1: $H_T \leq V_T$

Formula 2: $H_T + V_T \leq 40$ feet

Example 1:

V_1 = 3 FT

V_2 = 8 FT

$V_T = V_1 + V_2$ = 3 FT + 8 FT = 11 FT

H_1 = 2.5 FT

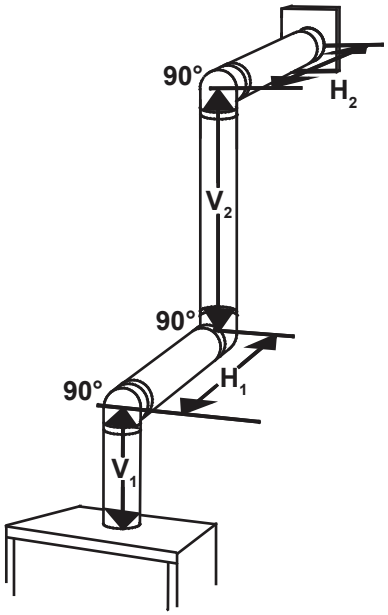
H_2 = 2 FT

$H_R = H_1 + H_2$ = 2.5 + 2 = 4.5 FT

H_O = .03 (three 90° elbows - 90°) = .03 (270° - 90°) = 5.4 FT

$H_T = H_R + H_O$ = 4.5 + 5.4 = 9.9 FT

$H_T + V_T$ = 9.9 + 11 = 20.9 FT



Formula 1: $H_T \leq V_T$

$9.9 \leq 11$

Formula 2: $H_T + V_T \leq 40$ FT

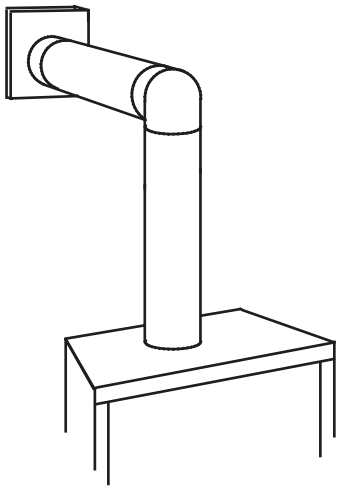
$20.9 \leq 40$

Since both formulas are met, this vent configuration is acceptable.

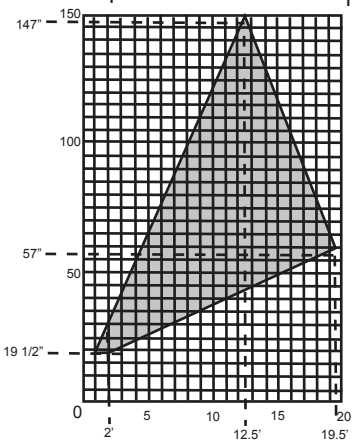
16.1

$(H_T) > (V_T)$

Simple venting configuration (only one 90° elbow)



See graph to determine the required vertical rise V_T for the required horizontal run H_T.



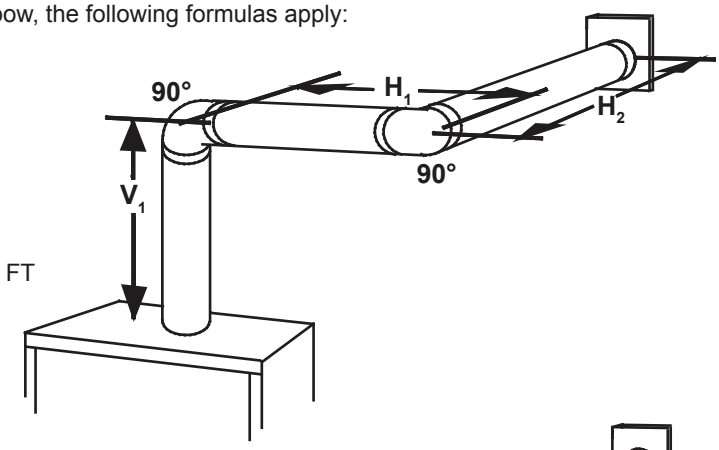
HORIZONTAL VENT RUN PLUS OFFSET IN FEET H_T

The shaded area within the lines represents acceptable values for H_T and V_T

For vent configurations requiring more than one 90° elbow, the following formulas apply:

Formula 1: $H_T \leq 4.2\ V_T$

Formula 2: $H_T + V_T \leq 24.75$ feet



Example 2:

$V_1 = V_T = 6$ FT

$H_1 = 3$ FT

$H_2 = 5$ FT

$H_R = H_1 + H_2 = 3 + 5 = 8$ FT

$H_O = .03$ (two 90° elbows - 90°) = .03 (180° - 90°) = 2.7 FT

$H_T = H_R + H_O = 8 + 2.7 = 10.7$ FT

$H_T + V_T = 10.7 + 6 = 16.7$ FT

Formula 1: $H_T \leq 4.2\ V_T$

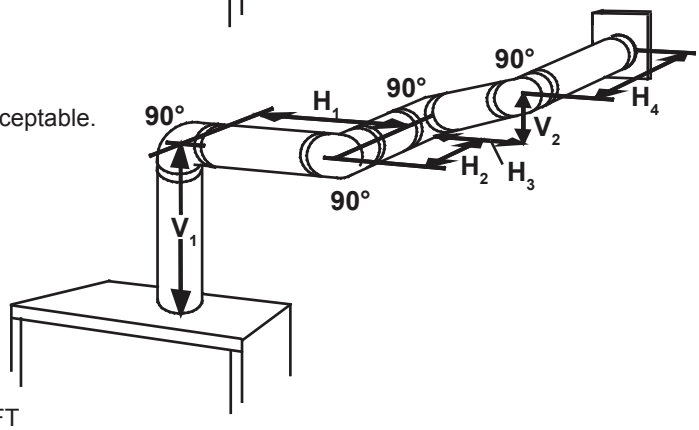
$4.2\ V_T = 4.2 \times 6 = 25.2$ FT

$10.7 \leq 25.2$

Formula 2: $H_T + V_T \leq 24.75$ FT

$16.7 \leq 24.75$

Since both formulas are met, this vent configuration is acceptable.



Example 3:

$V_1 = 4$ FT

$V_2 = 1.5$ FT

$V_T = V_1 + V_2 = 4 + 1.5 = 5.5$ FT

$H_1 = 2$ FT

$H_2 = 1$ FT

$H_3 = 1$ FT

$H_4 = 1.5$ FT

$H_R = H_1 + H_2 + H_3 + H_4 = 2 + 1 + 1 + 1.5 = 5.5$ FT

$H_O = .03$ (four 90° elbows - 90°) = .03 (360° - 90°) = 8.1 FT

$H_T = H_R + H_O = 5.5 + 8.1 = 13.6$ FT

$H_T + V_T = 13.6 + 5.5 = 19.1$ FT

Formula 1: $H_T \leq 4.2\ V_T$

$4.2\ V_T = 4.2 \times 5.5 = 23.1$ FT

$13.6 \leq 23.1$

Formula 2: $H_T + V_T \leq 24.75$ FT

$19.1 \leq 24.75$

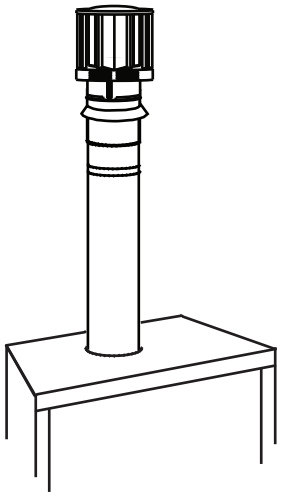
Since both formulas are met, this vent configuration is acceptable.

16.1_2

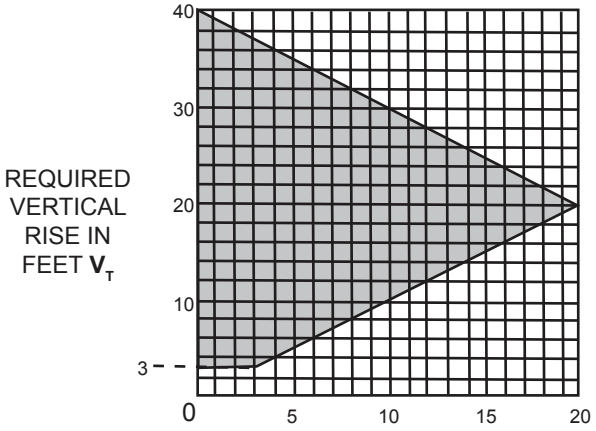
3.9 VERTICAL TERMINATION

$(H_T) \leq (V_T)$

Simple venting configurations.



See graph to determine the required vertical rise V_T for the required horizontal run H_T.



HORIZONTAL VENT RUN PLUS OFFSET IN FEET H_T

The shaded area within the lines represents acceptable values for H_T and V_T

For vent configurations requiring one or more 90° elbows the following formulas apply:

Formula 1: $H_T \leq V_T$

Formula 2: $H_T + V_T \leq 40$ feet

Example 6:

V_1 = 5 FT

V_2 = 6 FT

V_3 = 10 FT

$V_T = V_1 + V_2 + V_3 = 5 + 6 + 10 = 21$ FT

H_1 = 8 FT

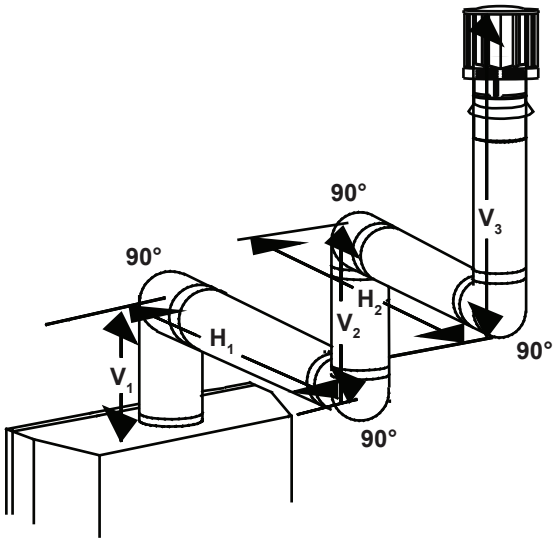
H_2 = 2.5 FT

$H_R = H_1 + H_2 = 8 + 2.5 = 10.5$ FT

H_O = .03 (four 90° elbows - 90°)
= .03 (360° - 90°) = 8.1 FT

$H_T = H_R + H_O = 10.5 + 8.1 = 18.6$ FT

$H_T + V_T = 18.6 + 21 = 39.6$ FT



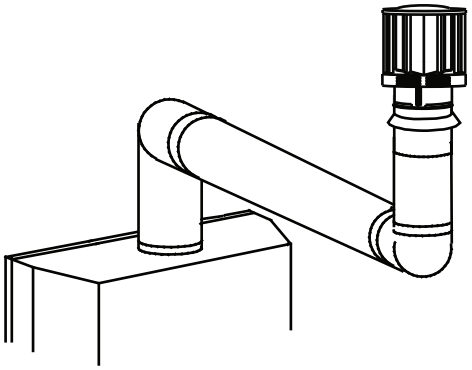
Formula 1: $H_T \leq 3.5\ V_T$
$18.6 \leq 21$

Formula 2: $H_T + V_T \leq 40$ FT
$39.6 \leq 40$

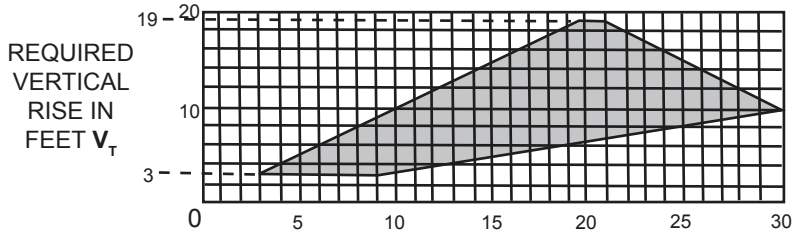
Since both formulas are met, this vent configuration is acceptable.

$(H_T) > (V_T)$

Simple venting configurations.

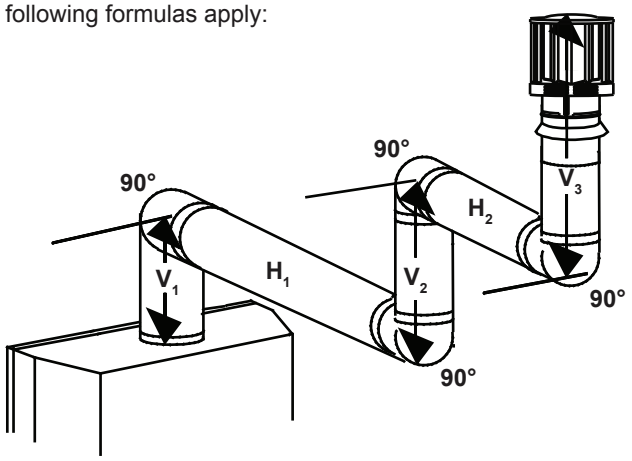


See graph to determine the required vertical rise V_T for the required horizontal run H_T.



The shaded area within the lines represents acceptable values for H_T and V_T

For vent configurations requiring more than two 90° elbows the following formulas apply:
Formula 1: $H_T \leq 3V_T$
Formula 2: $H_T + V_T \leq 40$ feet



Example 2:
V_1 = 2 FT
V_2 = 1 FT
V_3 = 1.5 FT
$V_T = V_1 + V_2 + V_3 = 2 + 1 + 1.5 = 4.5$ FT
H_1 = 6 FT
H_2 = 2 FT
$H_R = H_1 + H_2 = 6 + 2 = 8$ FT
H_O = .03 (four 90° elbows - 90°)
= .03 (360° - 90°) = 8.1 FT
$H_T = H_R + H_O = 8 + 8.1 = 16.1$ FT
$H_T + V_T = 16.1 + 4.5 = 20.6$ FT

Formula 1: $H_T \leq 3V_T$
$3V_T = 3 \times 4.5 = 13.5$ FT
$16.1 > 13.5$
Since this formula is not met, this vent configuration is **unacceptable.**

Formula 2: $H_T + V_T \leq 40$ feet
$20.6 \leq 40$
Since only formula 2 is met, this vent configuration is unacceptable and a new fireplace location or vent configuration will need to be established to satisfy both formulas.

18.1_2

4.0 INSTALLATION

⚠ WARNING

FOLLOW THE VENTING INSTRUCTIONS EXACTLY.

ALL INNER EXHAUST AND OUTER INTAKE VENT PIPE JOINTS MAY BE SEALED USING EITHER RED RTV HIGH TEMP SILICONE SEALANT W573-0002 (NOT SUPPLIED) OR BLACK HIGH TEMP MILL PAC W573-0007 (NOT SUPPLIED) WITH THE EXCEPTION OF THE APPLIANCE EXHAUST FLUE COLLAR WHICH MUST BE SEALED USING MILL PAC.

IF USING PIPE CLAMPS TO CONNECT VENT COMPONENTS, 3 SCREWS MUST ALSO BE USED TO ENSURE THE CONNECTION CANNOT SLIP OFF.

DO NOT CLAMP THE FLEXIBLE VENT PIPE.

RISK OF FIRE, EXPLOSION OR ASPHYXIATION. IMPROPER SUPPORT OF THE ENTIRE VENTING SYSTEM MAY ALLOW VENT TO SAG AND SEPARATE. USE VENT RUN SUPPORTS AND CONNECT VENT SECTIONS PER INSTALLATION INSTRUCTIONS.

RISK OF FIRE, DO NOT ALLOW LOOSE MATERIALS OR INSULATION TO TOUCH THE VENT PIPE. REMOVE INSULATION TO ALLOW FOR THE INSTALLATION OF THE ATTIC SHIELD AND TO MAINTAIN CLEARANCES TO COMBUSTIBLES.

68.2

4.1 WALL AND CEILING PROTECTION

⚠ WARNING

DO NOT FILL THE SPACE BETWEEN THE VENT PIPE AND ENCLOSURE WITH ANY TYPE OF MATERIAL. DO NOT PACK INSULATION OR COMBUSTIBLES BETWEEN CEILING FIRESTOPS. ALWAYS MAINTAIN SPECIFIED CLEARANCES AROUND VENTING AND FIRESTOP SYSTEMS. INSTALL WALL SHIELDS AND FIRESTOPS AS SPECIFIED. FAILURE TO KEEP INSULATION OR OTHER MATERIALS AWAY FROM VENT PIPE MAY CAUSE FIRE.

70.1

For clearances to combustible materials from the vent pipe, see “FRAMING” section.

For optimum performance it is recommended that all horizontal runs have a minimum 1” rise per foot when using flexible venting.

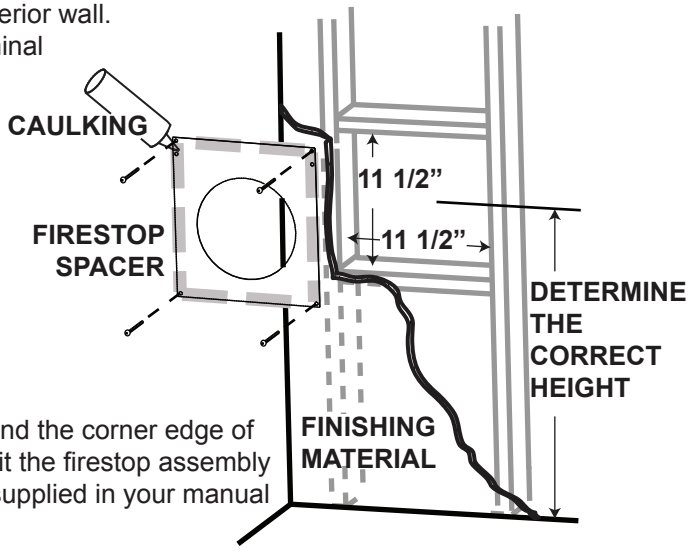
4.1.1 HORIZONTAL SHIELDING

⚠ WARNING

TERMINALS MUST NOT BE RECESSED INTO A WALL OR SIDING MORE THAN THE DEPTH OF THE RETURN FLANGE OF THE MOUNTING PLATE.

This application occurs when venting through an exterior wall. Having determined the correct height for the air terminal location, cut and frame a hole in the exterior wall as illustrated to accommodate the firestop assembly. Dry fit the firestop assembly before proceeding to ensure the brackets on the rear surface fit to the inside surface of the horizontal framing.

The length of the vent shield may be cut shorter for combustible walls that are less than 8 1/2" thick but the vent shield must extend the full depth of the combustible wall.



A. Apply a bead of caulking (not supplied) around the corner edge of the inside surface of the firestop assembly, fit the firestop assembly to the hole and secure using the 4 screws (supplied in your manual baggie).

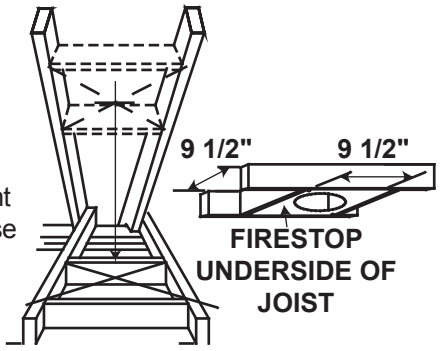
B. Once the vent pipe is installed in its final position, apply high temperature sealant W573-0007 (not supplied) between the pipe and the firestop.

20.6

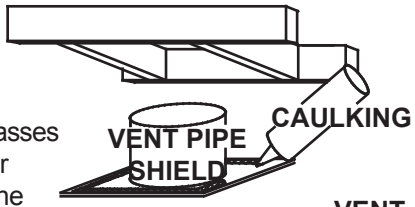
NOTE: The 11 1/2" framing dimension may be reduced to a 9 1/2" opening if the vent length, from the appliance to the framed hole, is 24" or greater. If not, it is recommended to use a terminal extension plate, W500-0103, when mounting the air terminal.

4.1.2 VERTICAL SHIELDING

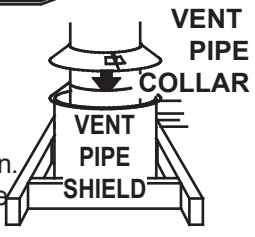
This application occurs when venting through a roof. Installation kits for various roof pitches are available from your authorized dealer / distributor. See accessories to order specific kits required.



A. Determine the air terminal location, cut and frame a square opening as illustrated in the ceiling and the roof to provide the minimum 1" clearance between the vent pipe and any combustible material. Try to center the vent pipe location midway between two joists to prevent having to cut them. Use a plumb bob to line up the center of the openings. A vent pipe shield will prevent any materials such as insulation, from filling up the 1" air space around the pipe. Nail headers between the joist for extra support.



B. Apply a bead of caulking (not supplied) to the framework or to the Wolf Steel vent pipe shield plate or equivalent (in the case of a finished ceiling), and secure over the opening in the ceiling. A firestop must be placed on the bottom of each framed opening in a roof or ceiling that the venting system passes through. Apply a bead of caulking all around and place a firestop spacer over the vent shield to restrict cold air from being drawn into the room or around the fireplace. Ensure that both spacer and shield maintain the required clearance to combustibles. Once the vent pipe is installed in its final position, apply sealant between the pipe and the firestop assembly.



C. In the attic, slide the vent pipe collar down to cover up the open end of the shield and tighten. This will prevent any materials, such as insulation, from filling up the 1" air space around the pipe.

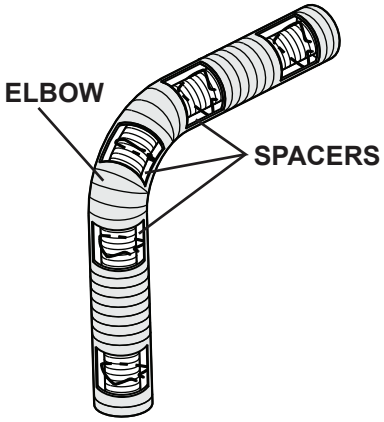
21.1

4.2 USING FLEXIBLE VENT COMPONENTS

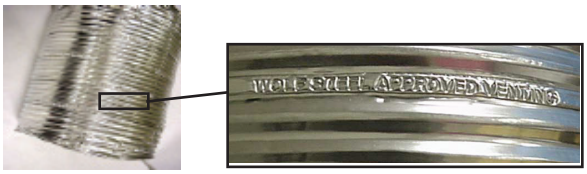
⚠WARNING

DO NOT ALLOW THE INNER FLEX PIPE TO BUNCH UP ON HORIZONTAL OR VERTICAL RUNS AND ELBOWS. KEEP IT PULLED TIGHT.

SPACERS ARE ATTACHED TO THE INNER FLEX PIPE AT PREDETERMINED INTERVALS TO MAINTAIN AN EVEN AIR GAP TO THE OUTER FLEX PIPE. THIS GAP IS REQUIRED FOR SAFE OPERATION. A SPACER IS REQUIRED AT THE START, MIDDLE AND END OF EACH ELBOW TO ENSURE THIS GAP IS MAINTAINED. THESE SPACERS MUST NOT BE REMOVED.



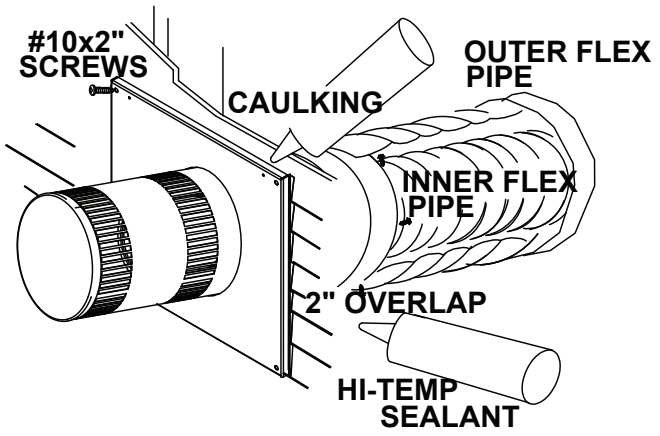
For safe and proper operation of the appliance, follow the venting instructions exactly.
All inner flex pipe and outer flex pipe joints may be sealed using high temperature sealant W573-0002 (not supplied) or the high temperature sealant W573-0007 Mill Pac (not supplied). However, the high temperature sealant W573-0007 Mill Pac (not supplied) must be used on the joint connecting the inner flex pipe and the exhaust flue collar.
Use only approved flexible vent pipe kits marked:



"Wolf Steel Approved Venting" as identified by the stamp only on the outer flex pipe.

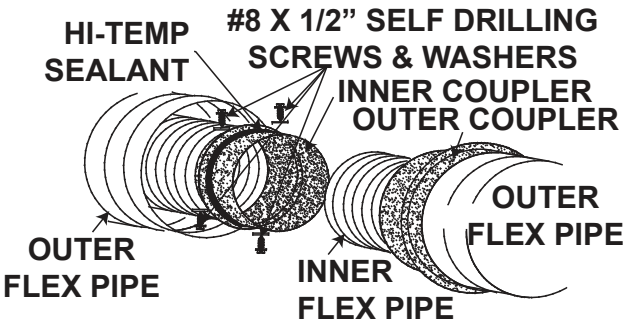
4.2.1 HORIZONTAL AIR TERMINAL INSTALLATION

A. Stretch the inner flex pipe to the required length taking into account the additional length needed for the finished wall surface. Slip the vent pipe a minimum of 2" over the inner sleeve of the air terminal and secure with 3 #8 screws. Apply a heavy bead of the high temperature sealant W573-0007 Mill Pac (not supplied).



B. Using the outer flex pipe, slide over the outer combustion air sleeve of the air terminal and secure with 3 #8 screws. Seal using high temperature sealant W573-0002 (not supplied).

C. Insert the vent pipes through the firestop maintaining the required clearance to combustibles. Holding the air terminal (lettering in an upright, readable position), secure to the exterior wall and make weather tight by sealing with caulking (not supplied).



D. If more vent pipe needs to be used to reach the fireplace, couple them together as illustrated. The vent system must be supported approximately every 3 feet for both vertical and horizontal runs. Use noncombustible strapping to maintain the minimum 1" clearance to combustibles.

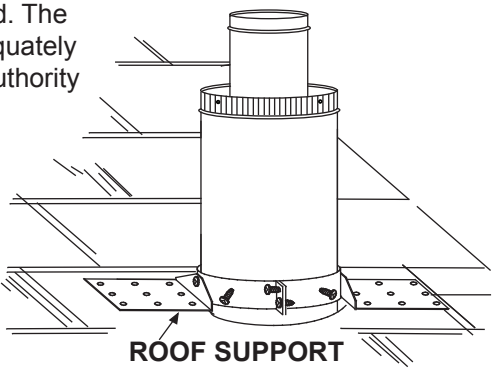
The air terminal mounting plate may be recessed into the exterior wall or siding no greater than the depth of its return flange.

4.2.2 VERTICAL AIR TERMINAL INSTALLATION

⚠ WARNING

MAINTAIN A MINIMUM 2” SPACE BETWEEN THE AIR INLET BASE AND THE STORM COLLAR.

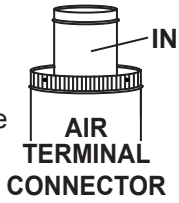
A. Fasten the roof support to the roof using the screws provided. The roof support is optional. In this case the venting is to be adequately supported using either an alternate method suitable to the authority having jurisdiction or the optional roof support.



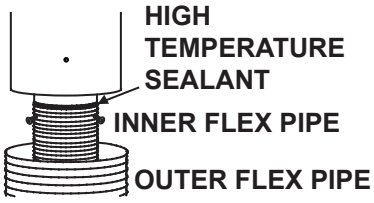
B. Stretch the inner flex pipe to the required length. Slip the inner flex pipe a minimum of 2” over the inner pipe of the air terminal connector and secure with 3 #8 screws. Seal using a heavy bead of high temperature sealant W573-0007 (not supplied).

C. Repeat using the outer flex pipe, using a heavy bead of high temperature sealant W573-0002 (not supplied).

D. Thread the air terminal connector / vent pipe assembly down through the roof. The air terminal must be positioned vertically and plumb. Attach the air terminal connector to the roof support, ensuring that the top of the air terminal is 16” above the highest point that it penetrates the roof.

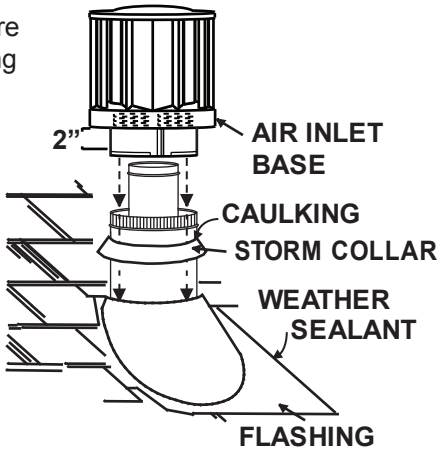


E. Remove nails from the shingles, above and to the sides of the air terminal connector. Place the flashing over the air terminal connector leaving a min. 3/4” of the air terminal connector showing above the top of the flashing. Slide the flashing underneath the sides and upper edge of the shingles. Ensure that the air terminal connector is properly centred within the flashing, giving a 3/4” margin all around. Fasten to the roof. Do not nail through the lower portion of the flashing. Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.



F. Aligning the seams of the terminal and air terminal connector, place the terminal over the air terminal connector making sure the vent pipe goes into the hole in the terminal. Secure with the three screws provided.

G. Apply a heavy bead of weatherproof caulking 2” above the flashing. Install the storm collar around the air terminal and slide down to the caulking. Tighten to ensure that a weather-tight seal between the air terminal and the collar is achieved.

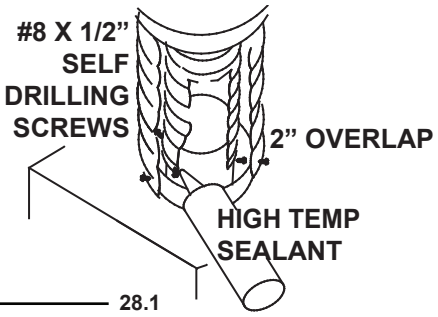


H. If more vent pipe needs to be used to reach the appliance see “HORIZONTAL AIR TERMINAL INSTALLATION” section.

4.2.3 APPLIANCE VENT CONNECTION

A. Install the inner flex pipe to the appliance. Secure with 3 screws and flat washers. Seal the joint and screw holes using the high temperature sealant W573-0007 (not supplied).

B. Install the outer flex pipe to the appliance. Attach and seal the joints using the high temperature sealant W573-0002 (not supplied).



28.1

4.3 USING RIGID VENT COMPONENTS

The vent system must be supported approximately every 3 feet for both vertical and horizontal runs. Use Wolf Steel Ltd. support ring assembly or equivalent noncombustible strapping to maintain the minimum clearance to combustibles for both vertical and horizontal runs.

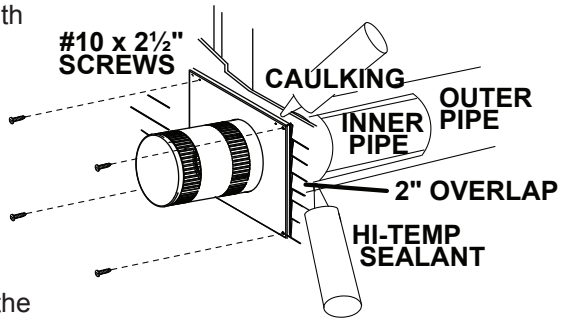
All inner exhaust and outer intake vent pipe joints may be sealed using either red high temperature silicone sealant W573-0002 (not supplied) or black high temperature sealant W573-0007 Mill Pac (not supplied) with the exception of the appliance exhaust flue collar which must be sealed using Mill Pac.

25.1

4.3.1 HORIZONTAL AIR TERMINAL INSTALLATION

A. Move the fireplace into position. Measure the vent length required between terminal and fireplace taking into account the additional length needed for the finished wall surface and any 1¼" overlaps between venting components.

B. Apply high temperature sealant W573-0007 (not supplied) to the outer edge of the inner collar of the fireplace. Attach the first inner rigid pipe component and secure using 3 self tapping screws. Repeat using the outer rigid pipe.

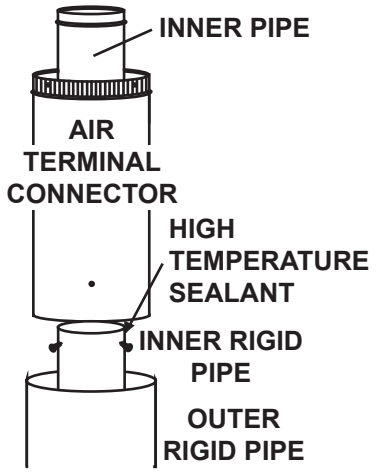


C. Insert the vent pipes through the firestop maintaining the required clearance to combustibles. Holding the air terminal (lettering in an upright, readable position), secure to the exterior wall and make weather tight by sealing with caulking (not supplied).

The air terminal mounting plate may be recessed into the exterior wall or siding no greater than the depth of its return flange.

26.2

4.3.2 VERTICAL AIR TERMINAL INSTALLATION



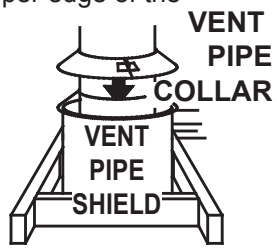
A. Move the appliance into position.

B. Fasten the roof support to the roof using the screws provided. The roof support is optional. In this case the venting is to be adequately supported using either an alternate method suitable to the authority having jurisdiction or the optional roof support.

C. Apply high temperature sealant W573-0007 (not supplied) to the outer edge of the inner sleeve of the air terminal. Slip the inner coupler a minimum of 2” over the sleeve and secure using 3 screws.

D. Apply high temperature sealant W573-0002 (not supplied) to the outer edge of the of the outside sleeve of the air terminal connector. Slip the outer coupler over the sleeve and secure as before. Trim the outer coupler even with the inner coupler end.

E. Thread the air terminal connector / vent pipe assembly down through the roof support and attach, ensuring that a minimum 16” of air terminal connector will penetrate the roof when fastened. If the attic space is tight, we recommend threading the Wolf Steel vent pipe collar or equivalent loosely onto the air terminal connector / vent pipe assembly as it is passed through the attic. The air terminal connector must be located vertically and plumb.



F. Remove nails from the shingles, above and to the sides of the air terminal connector. Place the flashing over the air terminal connector and slide it underneath the sides and upper edge of the shingles. Ensure that the air terminal connector is properly centered within the flashing, giving a 3/4” margin all around. Fasten to the roof. Do NOT nail through the lower portion of the flashing. Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.

G. Apply a heavy bead of waterproof caulking 2” above the flashing. Install the storm collar around the air terminal and slide down to the caulking. Tighten to ensure that a weather-tight seal between the air terminal connector and the collar is achieved.

H. Continue adding rigid venting sections, sealing and securing as above. Attach the inner collapsed telescopic sleeve to the last section of rigid piping. Secure with screws and seal. Repeat using the outer telescopic sleeve.

I. Run a bead of high temperature sealant W573-0007 (not supplied) around the outside of the inner collar on the appliance. Pull the telescopic sleeve a minimum of 2” onto the collar. Secure with 3 screws. Repeat with the outer telescopic sleeve.

J. In the attic, slide the vent pipe collar down to cover up the open end of the shield and tighten. This will prevent any materials, such as insulation, from filling up the 1” air space around the pipe.

27.2

4.4 RESTRICTING VERTICAL VENTS

Vertical terminations may display a very active flame. If this appearance is not desirable, the vent exit may be restricted using restrictor supplied. This reduces the velocity of the exhaust gases, slowing down the flame pattern and creating a more traditional appearance.

A. Remove all obstructing obstacles i.e.: Brick panels, logs, etc.

B. Remove the two screws from the firebox top.

C. Line up the holes on the restrictor plate with the holes in the top of the firebox and replace the screws.

D. Replace the brick panels, logs, etc.

77.1

4.5 GAS INSTALLATION

⚠ WARNING

RISK OF FIRE, EXPLOSION OR ASPHYXIATION. ENSURE THERE ARE NO IGNITION SOURCES SUCH AS SPARKS OR OPEN FLAMES.

SUPPORT GAS CONTROL WHEN ATTACHING GAS SUPPLY PIPE TO PREVENT DAMAGING GAS LINE.

ALWAYS LIGHT THE PILOT WHETHER FOR THE FIRST TIME OR IF THE GAS SUPPLY HAS RUN OUT WITH THE GLASS DOOR OPENED OR REMOVED. PURGING OF THE GAS SUPPLY LINE SHOULD BE PERFORMED BY A QUALIFIED SERVICE TECHNICIAN. ASSURE THAT A CONTINUOUS GAS FLOW IS AT THE BURNER BEFORE CLOSING THE DOOR. ENSURE ADEQUATE VENTILATION. FOR GAS AND ELECTRICAL LOCATIONS, SEE "DIMENSION" SECTION.

ALL GAS CONNECTIONS MUST BE CONTAINED WITHIN THE APPLIANCE WHEN COMPLETE.

HIGH PRESSURE WILL DAMAGE VALVE. DISCONNECT GAS SUPPLY PIPING BEFORE TESTING GAS LINE AT TEST PRESSURES ABOVE 1/2 PSIG.

VALVE SETTINGS HAVE BEEN FACTORY SET, DO NOT CHANGE.

Installation and servicing to be done by a qualified installer. **Do not use open flame.**

4.5.1 Move the appliance into position and secure.

4.5.2 If equipped with a flex connector the appliance is designed to accept a 1/2" gas supply. Without the connector it is designed to accept a 3/8" gas supply. The appliance is equipped with a manual shut off valve to turn off the gas supply to the appliance.

4.5.3 Connect the gas supply in accordance to local codes. In the absence of local codes, install to the current CAN/CSA-B149.1 Installation Code in Canada or to the current National Fuel Gas Code, ANSI Z223.1 / NFPA 54 in the United States.

4.5.4 When flexing any gas line, support the gas valve so that the lines are not bent or kinked.

4.5.5 Check for gas leaks by brushing on a soap and water solution.

30.1

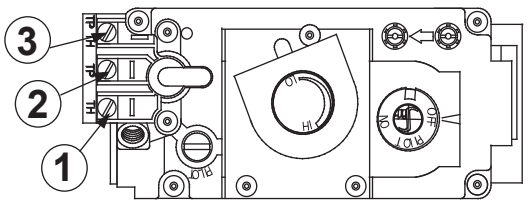
4.6 OPTIONAL WALL SWITCH / THERMOSTAT

⚠ WARNING

DO NOT CONNECT EITHER THE WALL SWITCH, THERMOSTAT OR GAS VALVE DIRECTLY TO 110 VOLT ELECTRICITY.

For ease of accessibility, an optional remote wall switch or millivolt thermostat may be installed in a convenient location. Route a 2 strand, solid core millivolt wire from the valve to the wall switch or millivolt thermostat. The recommended maximum lead length depends on wire size:

WIRE SIZE	MAX. LENGTH
14 gauge	100 feet
16 gauge	60 feet
18 gauge	40 feet



Disconnect the existing wires from terminals 1 and 3 (from the ON/OFF switch) and replace with the leads from the wall switch / millivolt thermostat.

50.1

4.7 MOBILE HOME INSTALLATION

This appliance is certified to be installed as an OEM (Original Equipment Manufacturer) installation in a manufactured home or mobile home and must be installed in accordance with the manufacturer's instructions and the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, in the United States or the Mobile Home Standard, CAN/CSA Z240 MH Series, in Canada. This appliance is only for use with the type(s) of gas indicated on the rating plate. A conversion kit is supplied with the mobile home appliance.

This Mobile/Manufactured Home Listed appliance comes factory equipped with a means to secure the unit. Built in appliances are equipped with 1/4" diameter holes located in the front left and right corners of the base. Use #10 hex head screws, inserted through the holes in the base to secure. For free standing products contact your local authorized dealer / distributor for the appropriate securing kit. For mobile home installations, the appliance must be fastened in place. It is recommended that the appliance be secured in all installations. Always turn off the pilot and the fuel supply at the source, prior to moving the mobile home. After moving the mobile home and prior to lighting the appliance, ensure that the logs are positioned correctly.

This appliance is certified to be installed in an aftermarket permanently located, manufactured (mobile) home, where not prohibited by local codes.
This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

Conversion Kits
This appliance is field convertible between Natural Gas (NG) and Propane (LP).
To convert from one gas to another consult your Authorized dealer/distributor.

29.1

5.0 FRAMING

⚠ WARNING

RISK OF FIRE!

IN ORDER TO AVOID THE POSSIBILITY OF EXPOSED INSULATION OR VAPOUR BARRIER COMING IN CONTACT WITH THE APPLIANCE BODY, IT IS RECOMMENDED THAT THE WALLS OF THE APPLIANCE ENCLOSURE BE "FINISHED" (IE: DRYWALL / SHEETROCK), AS YOU WOULD FINISH ANY OTHER OUTSIDE WALL OF A HOME. THIS WILL ENSURE THAT CLEARANCE TO COMBUSTIBLES IS MAINTAINED WITHIN THE CAVITY.

DO NOT NOTCH THE FRAMING AROUND THE APPLIANCE STAND-OFFS. FAILURE TO MAINTAIN AIR SPACE CLEARANCE MAY CAUSE OVER HEATING AND FIRE. PREVENT CONTACT WITH SAGGING OR LOOSE INSULATION OR FRAMING AND OTHER COMBUSTIBLE MATERIALS. BLOCK OPENING INTO THE CHASE TO PREVENT ENTRY OF BLOWN-IN INSULATION. MAKE SURE INSULATION AND OTHER MATERIALS ARE SECURED.

WHEN CONSTRUCTING THE ENCLOSURE ALLOW FOR FINISHING MATERIAL THICKNESS TO MAINTAIN CLEARANCES. FRAMING OR FINISHING MATERIAL CLOSER THAN THE MINIMUMS LISTED MUST BE CONSTRUCTED ENTIRELY OF NON-COMBUSTIBLE MATERIALS. MATERIALS CONSISTING ENTIRELY OF STEEL, IRON, BRICK, TILE, CONCRETE, SLATE, GLASS OR PLASTERS, OR ANY COMBINATION THEREOF ARE SUITABLE. MATERIALS THAT ARE REPORTED AS PASSING ASTM E 136, STANDARD TEST METHOD FOR BEHAVIOUR OF MATERIALS IN A VERTICAL TUBE FURNACE AT 750°C AND UL763 SHALL BE CONSIDERED NON-COMBUSTIBLE MATERIALS.

MINIMUM CLEARANCE TO COMBUSTIBLES MUST BE MAINTAINED OR A SERIOUS FIRE HAZARD COULD RESULT.

THE APPLIANCE REQUIRES A MINIMUM ENCLOSURE HEIGHT. MEASURE FROM THE APPLIANCE BASE.

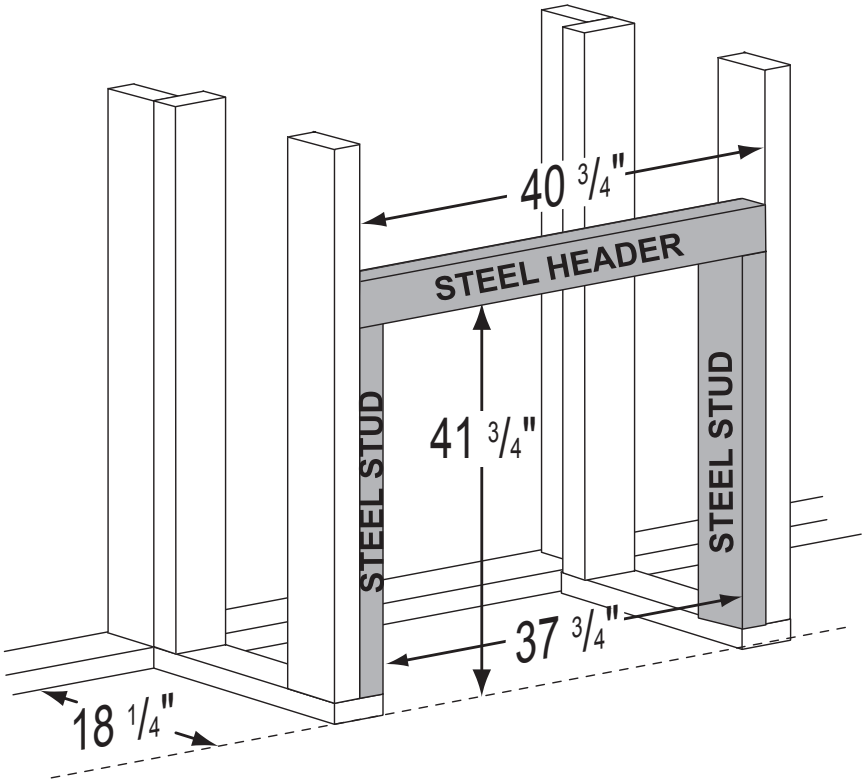
IF STEEL STUD FRAMING KITS WITH CEMENT BOARD ARE PROVIDED, THEY MUST BE INSTALLED.

71.1

It is best to frame your appliance after it is positioned and the vent system is installed. Use steel studs and frame to local building codes.

It is not necessary to install a hearth extension with this appliance.

When roughing in the appliance, raise the appliance to accommodate for the thickness of the finished floor materials, i.e. tile, carpeting, hard wood, which if not planned for will interfere with the opening of the lower access door and the installation of many decorative flashing accessories.



5.1 MINIMUM CLEARANCE TO COMBUSTIBLES

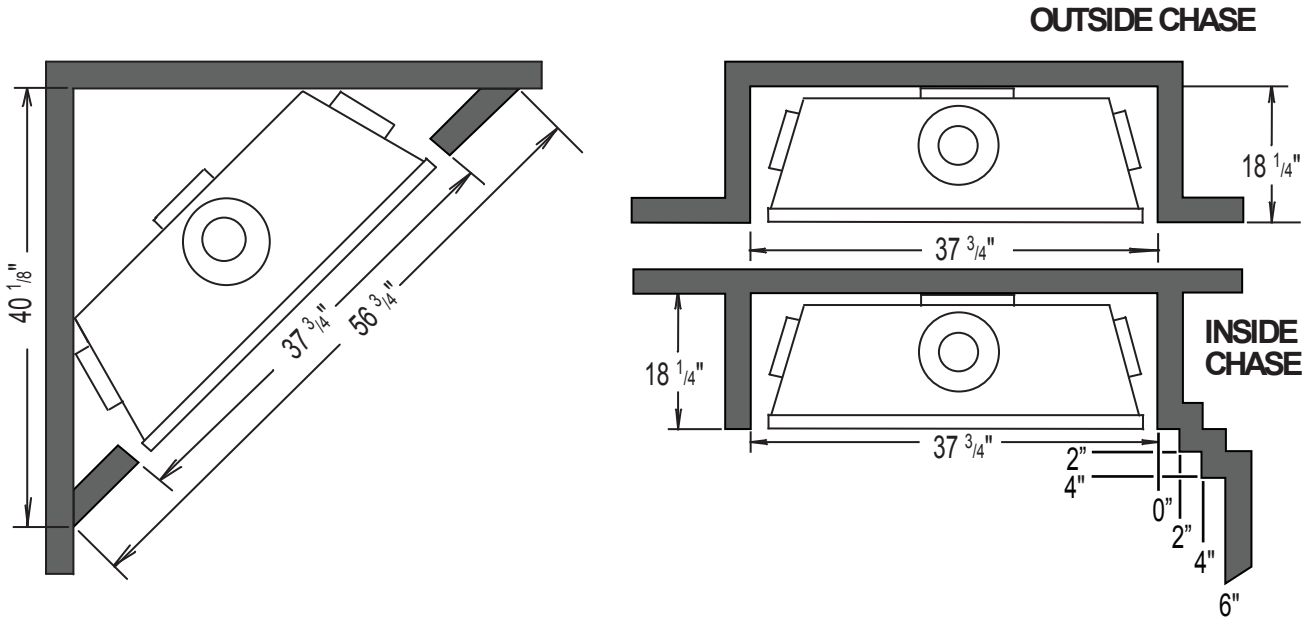
Combustible framing	- 0” to stand-offs (rear only)
Non-combustible framing*	- 0” to stand-offs (top and sides only)
Combustible finishing	- 0” to bottom edge of the appliance
Non-combustible finishing**	- 10” to top edge of the appliance
	- 3” to side edges of the appliance
Enclosure top	- 16 3/4”
Vent pipe***	- 2”
Recessed depth	- 18 1/4”

* The top header must be steel. The sides studs must be steel.

** The first 10 inches of finishing material above the appliance and the first 3 inches from the sides of the appliance must be non-combustible.

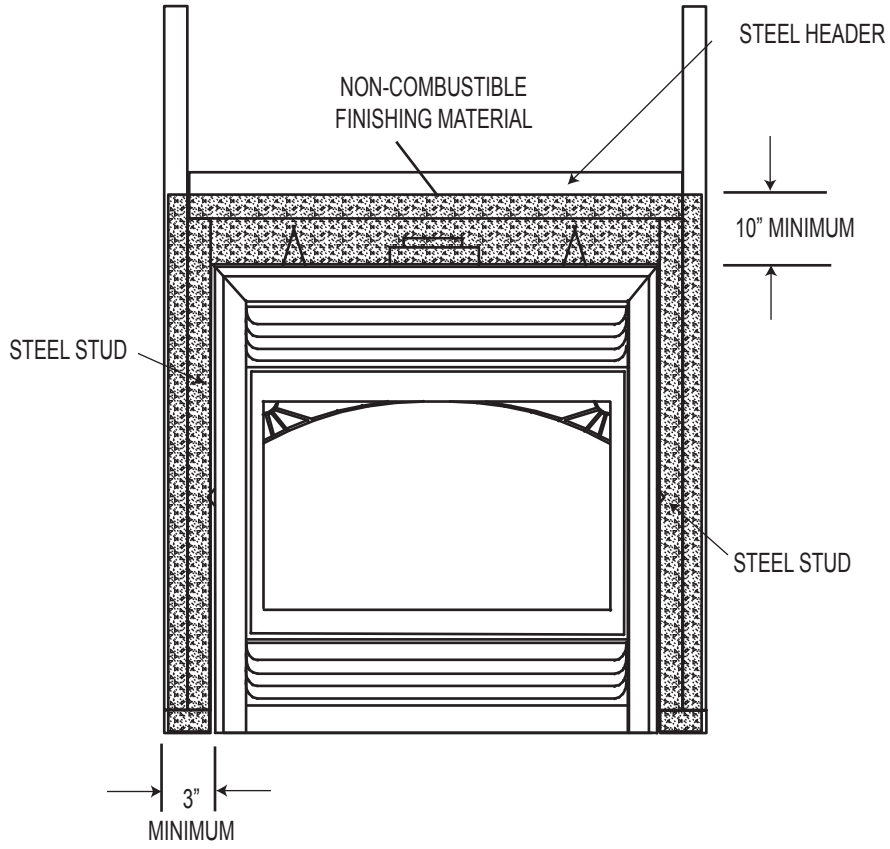
*** **HORIZONTAL VENT SECTIONS:** A minimum clearance of 2” all around the vent pipe on all horizontal runs to combustibles is required except for clearances in appliance enclosures. Use firestop spacer assembly W500-0292 (supplied). The first 2 feet of outer 7 inch diameter vent pipe from the appliance must be wrapped in the 1” thick insulation sleeve (supplied). Make sure the insulation is pulled down tight to the appliance when installed. There must be a 1 inch air gap in addition to the insulation sleeve.

*** **VERTICAL VENT SECTIONS:** A minimum of 1” all around the vent pipe on all vertical runs to combustibles is required except for clearances in appliance enclosures. Use firestop spacer W500-0096 (not supplied).



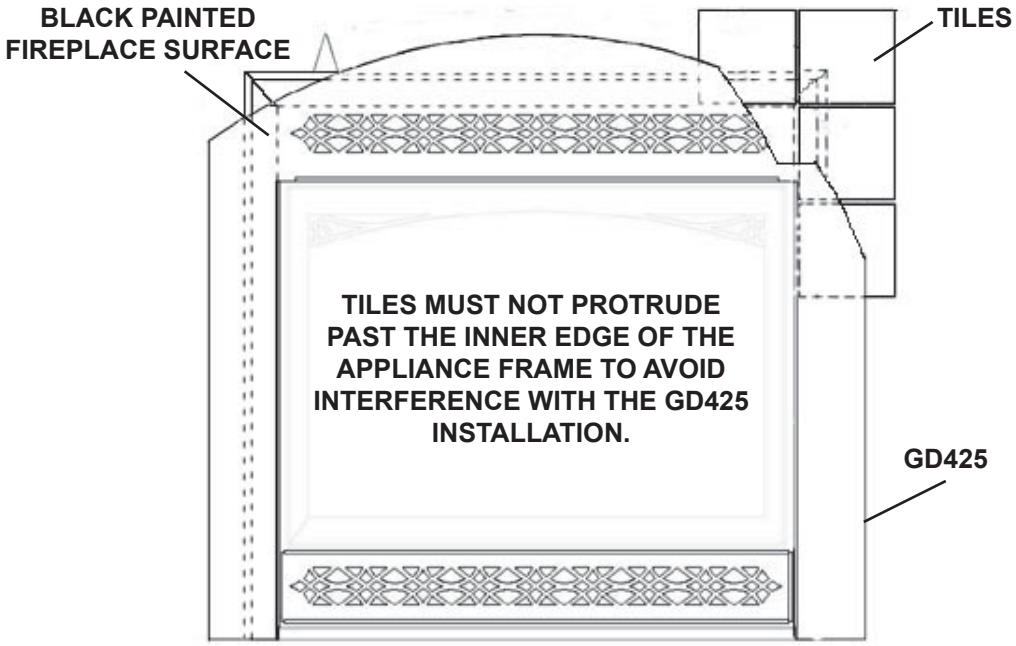
⚠WARNING

USE ONLY NON-COMBUSTIBLE MATERIAL SUCH AS CEMENT BOARD, CERAMIC TILE, MARBLE, ETC. WHEN FINISHING THE APPLIANCE. DO NOT USE WOOD.

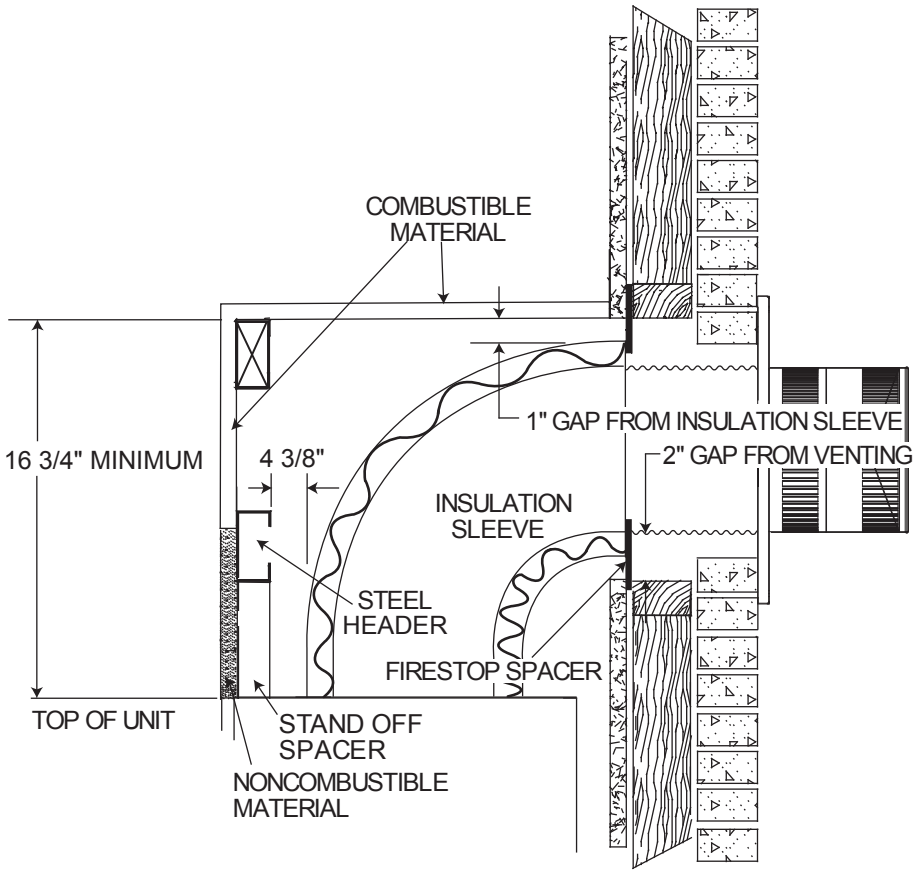


5.2 PROTRUDING FINISH

Non-combustible material (brick, stone or ceramic tile) may protrude over the black painted surface of the appliance front and is required for use in conjunction with the GD425 kit. This kit is designed to accommodate a noncombustible material to a maximum finished thickness of 3/4".



5.3 MINIMUM CLEARANCE TO COMBUSTIBLE ENCLOSURES



5.4 MINIMUM MANTEL CLEARANCES

⚠WARNING

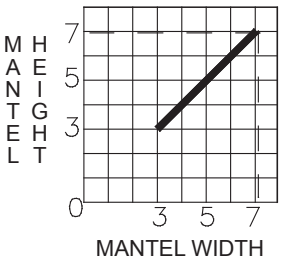
RISK OF FIRE, MAINTAIN ALL SPECIFIED AIR SPACE CLEARANCES TO COMBUSTIBLES. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY CAUSE A FIRE OR CAUSE THE APPLIANCE TO OVERHEAT. ENSURE ALL CLEARANCES (I.E. BACK, SIDE, TOP, VENT, MANTEL, FRONT, ETC.) ARE CLEARLY MAINTAINED.

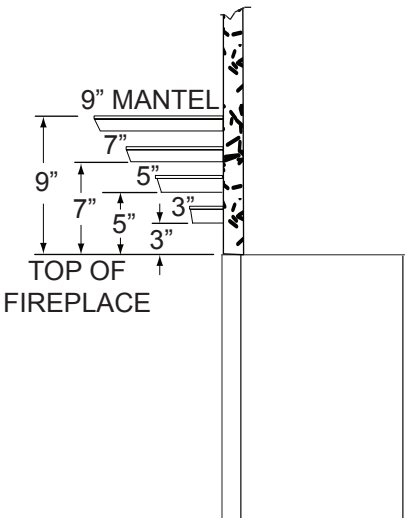
WHEN USING PAINT OR LACQUER TO FINISH THE MANTEL, THE PAINT OR LACQUER MUST BE HEAT RESISTANT TO PREVENT DISCOLOURATION.

73.1

Combustible mantel clearance can vary according to the mantel depth. Use the graph to help evaluate the clearance needed.

* When using the optional ornamental facia and panels, the minimum height from the top of the appliance to the mantel is 7”





6.0 FINISHING

⚠ WARNING
RISK OF FIRE!
NEVER OBSTRUCT THE FRONT OPENING OF THE APPLIANCE.
THE FRONT OF THE APPLIANCE MUST BE FINISHED WITH ANY NON-COMBUSTIBLE MATERIALS SUCH AS BRICK, MARBLE, GRANITE, ETC., PROVIDED THAT THESE MATERIALS DO NOT GO BELOW THE SPECIFIED DIMENSION AS ILLUSTRATED. AS AN ALTERNATIVE, YOU CAN FINISH THE APPLIANCE WITH DRYWALL, SEE ILLUSTRATIONS TO FOLLOW.
DO NOT STRIKE, SLAM OR SCRATCH GLASS. DO NOT OPERATE APPLIANCE WITH GLASS REMOVED, CRACKED, BROKEN OR SCRATCHED.
FACING AND/OR FINISHING MATERIAL MUST NEVER OVERHANG INTO THE APPLIANCE OPENING.

72.1

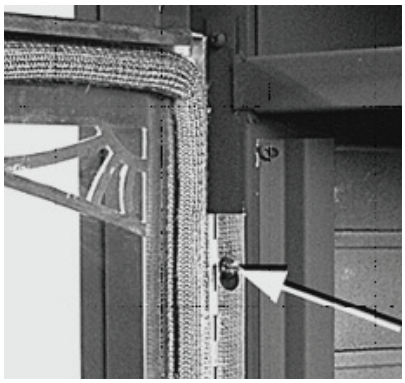
6.1 DOOR INSTALLATION

⚠ WARNING
GLASS MAY BE HOT, DO NOT TOUCH GLASS UNTIL COOLED.
THE DOOR LATCHES ARE PART OF A SAFETY SYSTEM AND MUST BE PROPERLY ENGAGED. DO NOT OPERATE THE APPLIANCE WITH LATCHES DISENGAGED.
FACING AND/OR FINISHING MATERIALS MUST NOT INTERFERE WITH AIR FLOW THROUGH AIR OPENINGS, LOUVRES OPENINGS, OPERATION OF LOUVRES OR DOORS OR ACCESS FOR SERVICE. OBSERVE ALL CLEARANCES WHEN APPLYING COMBUSTIBLE MATERIALS.
BEFORE DOOR IS REMOVED TURN THE APPLIANCE OFF AND WAIT UNTIL APPLIANCE IS COOL TO THE TOUCH. DOORS ARE HEAVY AND FRAGILE SO HANDLE WITH CARE.

75.1

Loosely thread a screw provided with the door kit into the top hole on the left side of the firebox. Hang the door by the hinge onto the screw. Insert the remaining 4 screws and tighten.

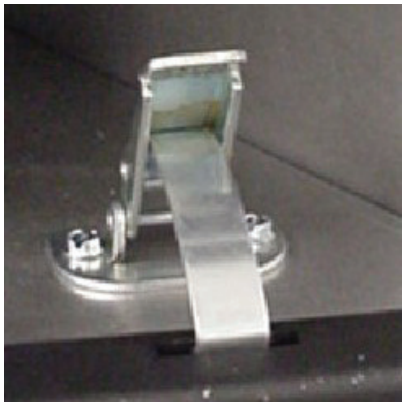
<u>IMPORTANT:</u> Ensure screws are driven in straight or the hole thread may be damaged.



6.2 DOOR CLOSING AND OPENING

Open the valve control door. Hook the top and bottom door latches, located at the right side of the door into the corresponding slots in the door.

The door latch holes are elongated for door levelling. To level the door, it may need to be lifted up at the right side before latching to ensure the door is level.



6.3 LOG SHIPPING BRACKET

Before installing the logs, you must first remove the log shipping bracket. Loosen the securing screw indicated. Slide the bracket to the right and lift up to remove.

6.4 DECORATIVE PANELS

This appliance does not include decorative brick panels, however, panels are required.
Panel kits are sold separately. Consult your local authorized dealer / distributor. See “REPLACEMENT PARTS - ACCESSORIES” section.

6.5 CHARCOAL STRIPS

The charcoal strips have been shipped in place. Protective foam must be removed before operation.

6.6 LOG PLACEMENT

⚠WARNING

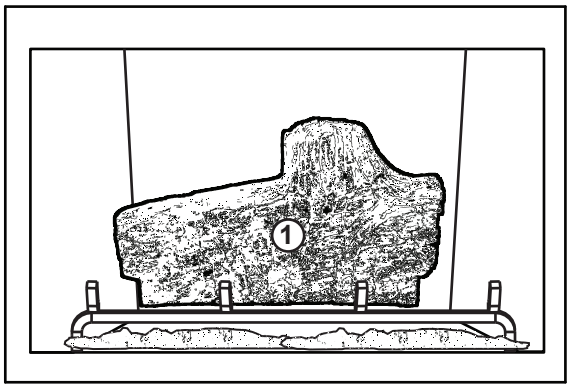
LOGS MUST BE PLACED IN THEIR EXACT LOCATION IN THE APPLIANCE. DO NOT MODIFY THE PROPER LOG POSITIONS, SINCE APPLIANCE MAY NOT FUNCTION PROPERLY AND DELAYED IGNITION MAY OCCUR.

THE LOGS ARE FRAGILE AND SHOULD BE HANDLED WITH CARE.

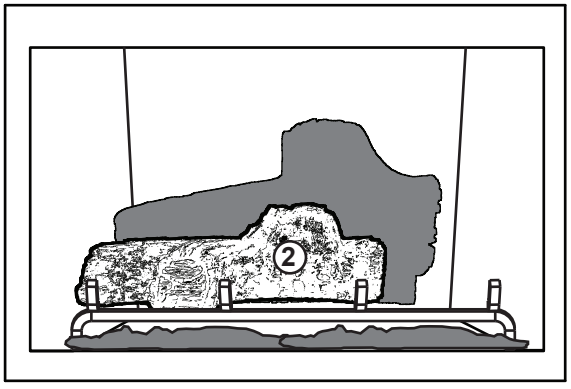
76.1

Log colours may vary. During initial use of the appliance, the colours will become more uniform as colour pigments burn in during the heat activated curing process.

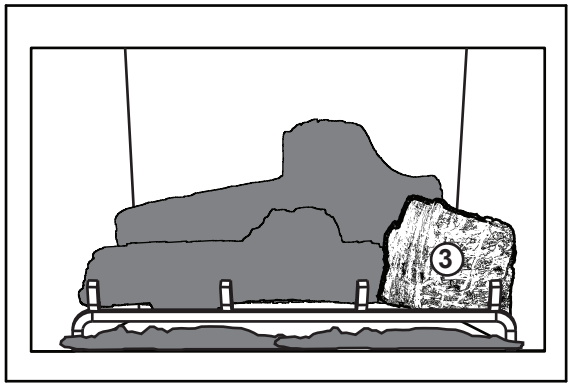
Blocked burner ports can cause an incorrect flame pattern.



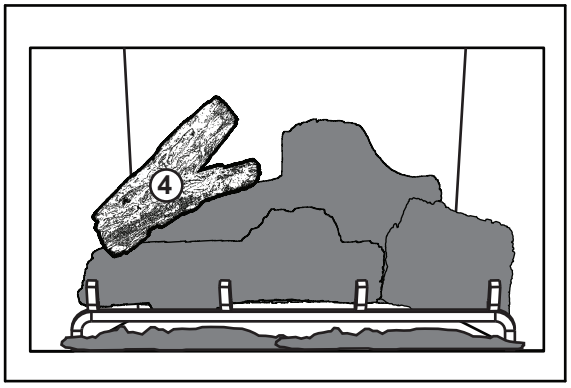
6.6.1 Centre the two charcoal strips, as shown, along the inside front of the firebox.
Place the rear log #1 onto the locating studs along the back edge of the PHAZERAMIC™ burner.



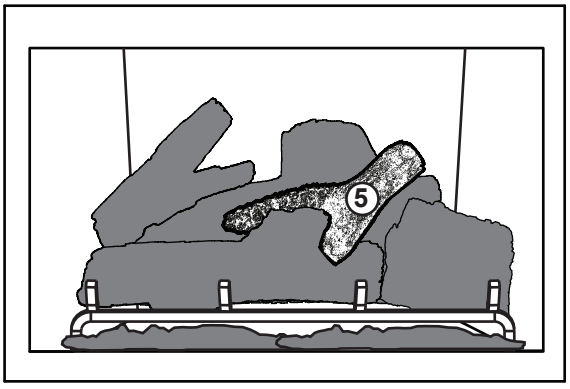
6.6.2 Position log #2 onto the locators on the PHAZERAMIC™ burner.



6.6.3 Position log #3 onto the right most grate rail with the charred face to the front. Align the groove on the underside of the log, with the rail of the grate. Push the log back to the pilot housing. Log #3 should fit tight against log #2.



6.6.4 Place log #4 with the charred branch pointed inward. Locate the pins into the holes in log #1 and log #2, this will hold the rear log in position.



6.6.5 Place the end of log #5 on the right end of log #1. The fork in the log should straddle the knot on top of log #2.

6.7 CHARCOAL EMBERS

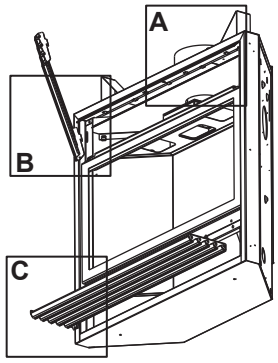
Randomly place the charcoal embers along the front and sides of the log support tray in a realistic manner.
Fine dust found in the bottom of the bag should not be used.
NOTE: Charcoal embers are not to be placed on the burner.

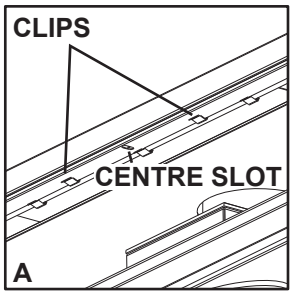
32.1

6.8 GLOWING EMBERS

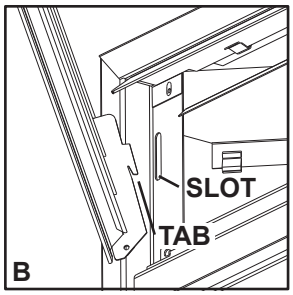
Glowing embers (not supplied) maybe used to enhance the flame's appearance.

6.9 LOUVRE INSTALLATION

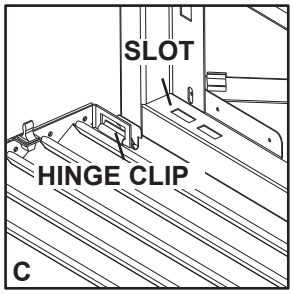




HOOD
Attach the hood by pressing the top flange into the clips along the top of the louvre opening. Secure using a screw through the centre slot.



UPPER LOUVRES
Insert the louvre tabs into the slots located at the top left and right corners of the unit.

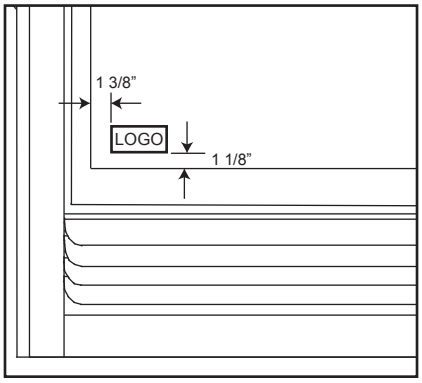


LOWER LOUVRES
Insert the hinge clips into the slots located at the bottom left and right corners of the unit. To remove the louvres, pull the back tabs of the clips forward, while pushing the louvre assembly back. Lift the clip.

57.3

6.10 LOGO PLACEMENT

Remove the backing of the logo supplied and place on the glass viewing area, measuring from the glass edges as indicated.



7.0 WIRING DIAGRAM / ELECTRICAL INFORMATION

⚠ WARNING

DO NOT USE THIS APPLIANCE IF ANY PART HAS BEEN UNDER WATER. CALL A QUALIFIED SERVICE TECHNICIAN IMMEDIATELY TO HAVE THE APPLIANCE INSPECTED FOR DAMAGE TO THE ELECTRICAL CIRCUIT.

RISK OF ELECTRICAL SHOCK OR EXPLOSION. DO NOT WIRE 110V TO THE VALVE OR TO THE APPLIANCE WALL SWITCH. INCORRECT WIRING WILL DAMAGE CONTROLS.

ALL WIRING SHOULD BE DONE BY A QUALIFIED ELECTRICIAN AND SHALL BE IN COMPLIANCE WITH LOCAL CODES. IN THE ABSENCE OF LOCAL CODES, USE THE CURRENT CSA22.1 CANADIAN ELECTRIC CODE IN CANADA OR THE CURRENT NATIONAL ELECTRIC CODE ANSI/NFPA NO. 70 IN THE UNITED STATES.

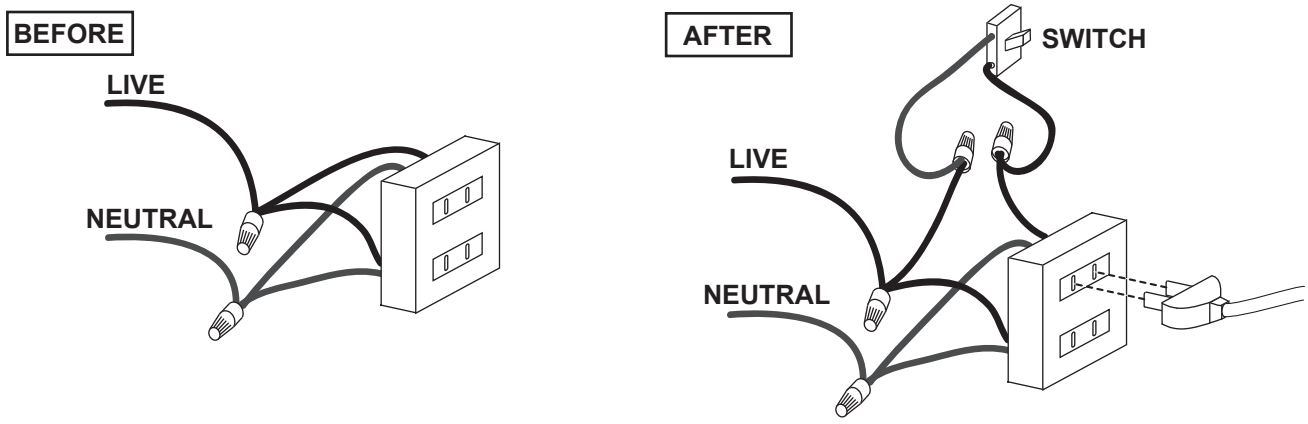
ALWAYS LIGHT THE PILOT WHETHER FOR THE FIRST TIME OR IF THE GAS SUPPLY HAS RAN OUT, WITH THE GLASS DOOR OPENED OR REMOVED.

69.2

The NIGHT LIGHT is provided with a manual “in-line” switch to turn the light on and off. There are alternate methods of operating the light.

An example of one method would be to “hard-wire” a wall switch. The switch could be installed in a desired location to operate the NIGHT LIGHT plugged into one of the two receptacles on the appliance junction box. The other receptacle would still have power to operate other accessories (see schematic below).

This switch could be:
• Toggle • Photo cell • Remote • Motion Sensor
All switches are available at your building store.



8.0 OPERATION

⚠ WARNING

IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

ALWAYS LIGHT THE PILOT WHETHER FOR THE FIRST TIME OR IF THE GAS SUPPLY HAS RUN OUT WITH THE GLASS DOOR OPENED OR REMOVED.

Ensure that a continuous gas flow is at the burner before installing the door. When lit for the first time, the appliance will emit an odor for a few hours. This is a normal temporary condition caused by the "burn-in" of paints and lubricants used in the manufacturing process and will not occur again.
After extended periods of non-operation such as following a vacation or a warm weather season, the appliance may emit a slight odor for a few hours. This is caused by dust particles in the heat exchanger burning off. In both cases, open a window to sufficiently ventilate the room.

FOR YOUR SAFETY READ BEFORE LIGHTING:

A. This appliance is equipped with a pilot which must be lit by hand while following these instructions exactly.
B. Before operating smell all around the appliance area for gas and next to the floor because some gas is heavier than air and will settle on the floor.
C. Use only your hand to turn the gas control knob. Never use tools. If the knob will not turn by hand, do not try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control which has been under water.

WHAT TO DO IF YOU SMELL GAS:

- Turn off all gas to the appliance.
- Open windows.
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

GAS KNOB

LIGHTING INSTRUCTIONS:

WARNING: The gas valve has an interlock device which will not allow the pilot burner to be lit until the thermocouple has cooled. Allow approximately 60 seconds for the thermocouple to cool.
When lighting and re-lighting, the gas knob cannot be turned from pilot to off unless the knob is depressed slightly.

1. Stop! Read the above safety information on this label.
2. Turn off all electric power to the appliance.
3. Turn the gas knob clockwise ↷ to off.
4. Wait five (5) minutes to clear out any gas. If you smell gas including near the floor. Stop! Follow "B" in the above safety information on this label. If you don't smell gas go the next step.
5. Turn gas knob counter-clockwise ↶ to pilot.
6. Depress slightly and hold gas knob while lighting the pilot with the push button igniter. Keep knob depressed for one minute, then release. If pilot does not continue to burn, repeat steps 3 through 5.
7. With pilot lit, depress and turn gas knob counter-clockwise ↶ to on.
8. If equipped with remote on-off switch / thermostat, main burner may not come on when you turn valve to on. Remote switch must be in the on position to ignite burner.
9. Turn on all electric power to the appliance.

TO TURN OFF GAS

1. Turn off all electric power to the appliance if service is to be performed.
2. Push in gas control knob slightly and turn clockwise ↷ to off. Do not force.

TURN THE CONTROL VALVE TO THE OFF POSITION WHEN HEATER IS NOT IN USE.

47.2

9.0 ADJUSTMENTS

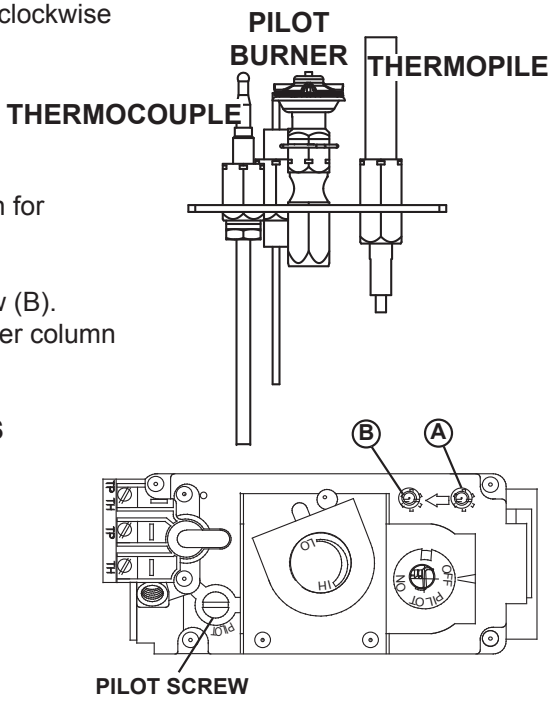
9.1 PILOT BURNER ADJUSTMENT

Adjust the pilot screw to provide properly sized flame. Turn in a clockwise direction to reduce the gas flow.

Inlet pressure can be checked by turning screw (A) counter-clockwise until loosened and then placing pressure gauge tubing over the test point. Gauge should read 7” (minimum 4.5”) water column for natural gas or 13” (11” minimum) water column for propane. Check that main burner is operating on “HI”.

Outlet pressure can be checked the same as above using screw (B). Gauge should read 3.5” water column for natural gas or 10” water column for propane. Check that main burner is operating on “HI”.

AFTER TAKING PRESSURE READINGS, TIGHTEN SCREWS FIRMLY TO SEAL. DO NOT OVER TORQUE. LEAK TEST.



39.3

9.2 VENTURI ADJUSTMENT

⚠WARNING

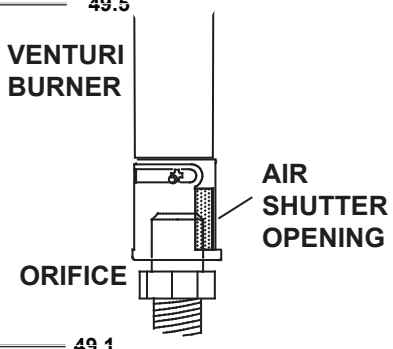
CARBON CAN BE DISTRIBUTED IN SURROUNDING LIVING AREA IF THE AIR SHUTTER IS IMPROPERLY ADJUSTED.

49.5

This appliance has an air shutter that has been factory set open according to the chart below:

Regardless of venturi orientation, closing the air shutter will cause a more yellow flame, but can lead to carboning. Opening the air shutter will cause a more blue flame, but can cause flame lifting from the burner ports. The flame may not appear yellow immediately; allow 15 to 30 minutes for the final flame color to be established.

AIR SHUTTER ADJUSTMENT MUST ONLY BE DONE BY A QUALIFIED INSTALLER!



49.1

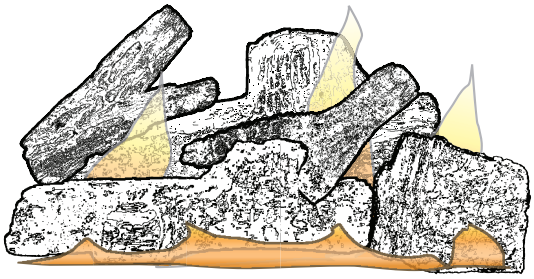
The air shutter on this CDV70 has been set for the longest horizontal vent length possible - 20 ft. Failure to adjust the air shutter on shorter vent runs will result in a much smaller than intended flame appearance.

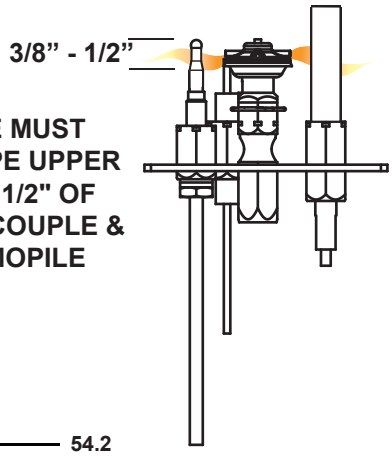
The air shutter opening may be adjusted to as little as 1/4” (for propane models) depending on length and configuration. Please refer to the installation manual for adjustment procedure.

Air Shutter Openings	
	Front
LP	1/2”
NG	1/4”

9.3 FLAME CHARACTERISTICS

It's important to periodically perform a visual check of the pilot and burner flames. Compare them to the illustrations provided. If any flames appear abnormal call a service person.





54.2

10.0 MAINTENANCE

⚠WARNING

TURN OFF THE GAS AND ELECTRICAL POWER BEFORE SERVICING THE APPLIANCE.

APPLIANCE MAY BE HOT, DO NOT SERVICE UNTIL APPLIANCE HAS COOLED.

DO NOT USE ABRASIVE CLEANERS.

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing. This appliance and its venting system should be inspected before use and at least annually by a qualified service person. The appliance area must be kept clear and free of combustible materials, gasoline or other flammable vapors and liquids. The flow of combustion and ventilation air must not be obstructed.

1. In order to properly clean the burner and pilot assembly, remove the logs, rocks and/or glass to expose both assemblies.
2. Keep the control compartment, media, burner, air shutter opening and the area surrounding the logs clean by vacuuming or brushing, at least once a year.
3. Check to see that all burner ports are burning. Clean out any of the ports which may not be burning or are not burning properly.
4. Check to see that the pilot flame is large enough to engulf the flame sensor and/or thermocouple / thermopile as well as reaches the burner.
5. Replace the cleaned logs, rocks or glass. Failure to properly position the media may cause carboning which can be distributed in the surrounding living area.
6. Check to see that the main burner ignites completely on all openings when turned on. A 5 to 10 second total light-up period is satisfactory. If ignition takes longer, consult your local authorized dealer / distributor.
7. Check that the gasketing on the sides, top and bottom of the door is not broken or missing. Replace if necessary.
8. If for any reason the vent air intake system is disassembled, re-install and re-seal per the instructions provided for the initial installation.

40.1

10.1 NIGHT LIGHT REPLACEMENT

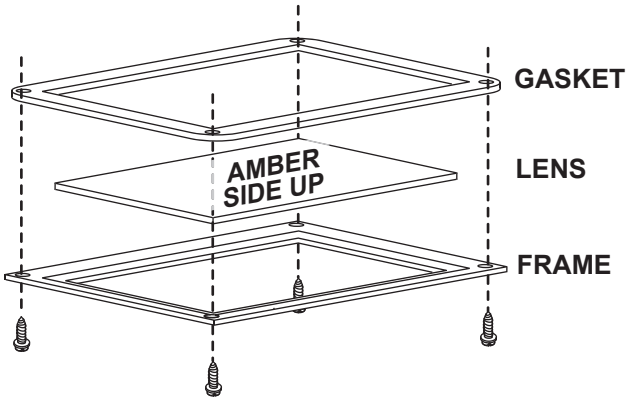
Your appliance came equipped with our "NIGHT LIGHT". The light has been pre-wired and can be controlled from the switch on the control panel.

It is recommended that the NIGHT LIGHT be in the off position when the appliance is on.

If in the event the lamp or lens needs to be replaced, follow the instructions below.

Unplug the light from inside the appliance.

Remove the four screws that secure the lens frame. This frame retains the glass lens. The lamp can now be accessed.



<u>NOTE:</u> Do not handle the lamp (bulb) with bare fingers, protect with a clean dry cloth.

The lamp will pull straight out of the socket. Replace with Wolf Steel parts only, as lamp and lens are special "high temperature" products.

When re-installing, ensure integrity of gasket seal.

THE FIREBOX MUST BE SEALED.

<u>NOTE:</u> Over tightening the screws could break the lens.

"Light Leakage" from the upper louvre area may be noticed. The holes in the lamp housing are necessary for ventilation and must not be covered.

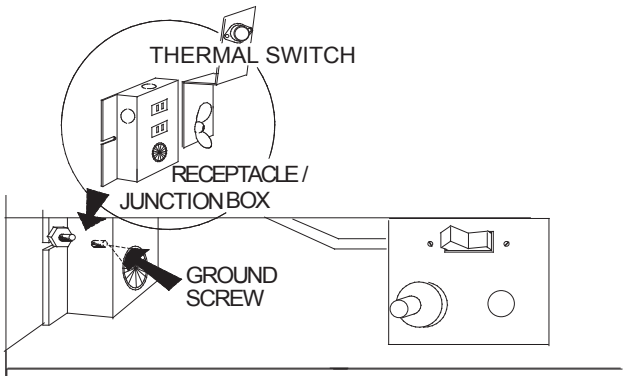
10.2 THERMAL SWITCH REPLACEMENT

The thermal switch is located to the left side of the lower control area, on a bracket and mounted beside the junction box.

10.2.1 Unplug the blower from the junction box or turn off the power to the appliance if hardwired.

10.2.2 Remove the fastener. Pivot the bracket out from the firebox side.

10.2.3 Disconnect the slip-on connectors and remove the thermal switch from the bracket.



10.3 BLOWER REPLACEMENT

⚠ WARNING

RISK OF FIRE AND ELECTRICAL SHOCK.

TURN OFF THE GAS AND ELECTRICAL POWER BEFORE SERVICING THIS APPLIANCE.

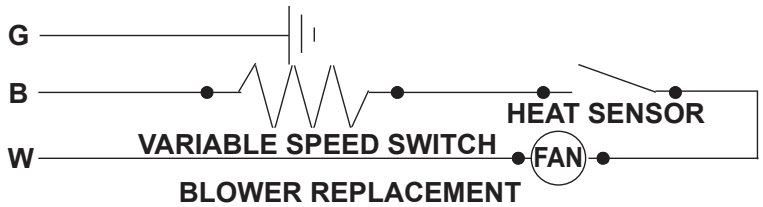
USE ONLY WOLF STEEL APPROVED OPTIONAL ACCESSORIES AND REPLACEMENT PARTS WITH THIS APPLIANCE. USING NON-LISTED ACCESSORIES (BLOWERS, DOORS, LOUVRES, TRIMS, GAS COMPONENTS, VENTING COMPONENTS, ETC.) COULD RESULT IN A SAFETY HAZARD AND WILL VOID THE WARRANTY AND CERTIFICATION.

ENSURE THAT THE FAN'S POWER CORD IS NOT IN CONTACT WITH ANY SURFACE OF THE APPLIANCE TO PREVENT ELECTRICAL SHOCK OR FIRE DAMAGE. DO NOT RUN THE POWER CORD BENEATH THE APPLIANCE.

THE WIRE HARNESS PROVIDED IN THE BLOWER KIT IS A UNIVERSAL HARNESS. WHEN INSTALLED, ENSURE THAT ANY EXCESS WIRE IS CONTAINED, PREVENTING IT FROM MAKING CONTACT WITH MOVING OR HOT OBJECTS.

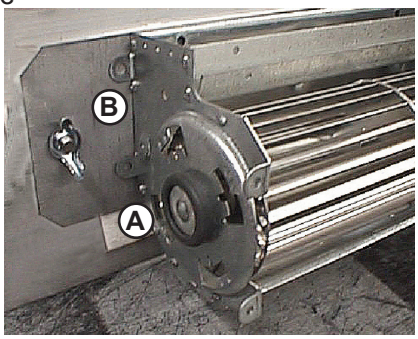
51.5

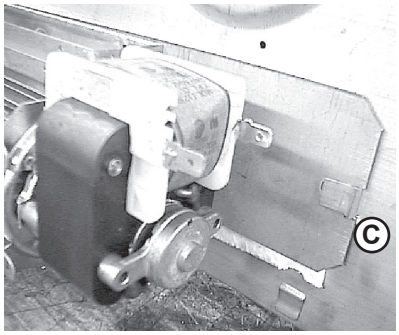
This appliance comes equipped with a blower, a heat sensor, variable on/off speed control and a power cord.



BLOWER REPLACEMENT

The blower is thermally activated, so when it is turned on, it will automatically start approximately 15 minutes after lighting the appliance and will run for approximately 30 minutes after the appliance has been turned off. Use of the fan increases the output of heat. Air, drawn in through the lower louvre access door, is driven up the back of the firebox, and exhausted as hot air between the upper louvres.





10.3.1 Open the lower control area.
10.3.2 Remove the control panel (3 screws).
10.3.3 Unplug the blower from the junction box or turn off the power to the appliance if hardwired.
10.3.4 Undo the fastener at the left side of the blower mounting plate. The blower should now slide to the left, away from the mounting tab.
10.3.5 Finally, disconnect the slip-on connectors at the motor of the blower.

Drywall dust will penetrate into the blower bearings, causing irreparable damage. Care must be taken to prevent drywall dust from coming into contact with the blower or its compartment. Any damage resulting from this condition is not covered by the warranty policy.

11.0 REPLACEMENTS

⚠ WARNING

FAILURE TO POSITION THE PARTS IN ACCORDANCE WITH THIS MANUAL OR FAILURE TO USE ONLY PARTS SPECIFICALLY APPROVED WITH THIS APPLIANCE MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY.

**** THIS IS A FAST ACTING THERMOCOUPLE. IT IS AN INTEGRAL SAFETY COMPONENT. REPLACE ONLY WITH A FAST ACTING THERMOCOUPLE SUPPLIED BY WOLF STEEL LTD.**

Contact your dealer or the factory for questions concerning prices and policies on replacement parts. Normally all parts can be ordered through your Authorized dealer / distributor.
FOR WARRANTY REPLACEMENT PARTS, A PHOTOCOPY OF THE ORIGINAL INVOICE WILL BE REQUIRED TO HONOUR THE CLAIM.

When ordering replacement parts always give the following information:

- Model & Serial Number of appliance
- Installation date of appliance
- Part number
- Description of part
- Finish

*** IDENTIFIES ITEMS WHICH ARE NOT ILLUSTRATED. FOR FURTHER INFORMATION, CONTACT YOUR AUTHORIZED DEALER.**

41.2

COMPONENTS

REF NO.	CDV70	DESCRIPTION
1	W135-0205	#1 REAR LOG
2	W135-0206	#2 MIDDLE LOG
3	W135-0207	#3 RIGHT LOG
4	W135-0208	#4 LEFT LOG
5	W135-0218	#5 CROSSOVER LOG
6	GL-644	LOG SET ASSEMBLY
7*	W090-0109	CHARCOAL STRIP
8*	W390-0002	DOOR LATCH
9	W725-0025	NATURAL GAS VALVE
9	W725-0026	PROPANE GAS VALVE
10*	W380-0010	PILOT ON/OFF KNOB EXTENSION
11*	W380-0011	FLAME ADJUSTMENT KNOB EXTENSION
12	W455-0058	#35 NATURAL GAS ORIFICE
12	W455-0051	#51 PROPANE GAS ORIFICE
13	W357-0001	PIEZO IGNITER
14	W680-0005	THERMOCOUPLE
15	W240-0006	ELECTRODE C/W LEAD
16	W680-0004	THERMOPILE
17	W010-0801	NATURAL GAS PILOT ASSEMBLY
17	W010-0800	PROPANE GAS PILOT ASSEMBLY
18	W455-0070	NATURAL GAS PILOT INJECTOR
18	W455-0068	PROPANE GAS PILOT INJECTOR
19*	W385-0430	CONTINENTAL LOGO
20*	W010-1453	INSULATION SLEEVE
21*	W010-0621	GLASS C/W GASKET
22*	W562-0009	DOOR GASKET (100 INCHES)
23	W500-0292	FIRESTOP SPACER
24	W010-1135	BURNER ASSEMBLY

NOTE: Care must be taken when removing and disposing of any broken glass or damaged components. Be sure to vacuum up any broken glass from inside the appliance before operation.

COMPONENTS

REF NO.	CDV70	DESCRIPTION
25*	W200-0146	COVER PLATE
26*	W290-0080	COVER PLATE GASKET
27	W062-0005	BLOWER
28	W690-0002	THERMODISC
29*	W750-0050	BLOWER WIRE
30*	W660-0019	VARIABLE SPEED SWITCH
31*	W300-0067	NIGHT LIGHT GLASS
32*	W387-0006	10W BULB
33*	W707-0006	NIGHT LIGHT WIRE
34*	W290-0080	ACCENT LENS GASKET
35*	W500-0130	RESTRICTOR PLATE
36	L38K	LOUVRE KIT - UPPER & LOWER - BLACK

ROOF TERMINAL KITS

REF NO.	CDV70	DESCRIPTION
GD-110 ROOF TERMINAL KIT - 1/12 TO 7/12 PITCH		
37	W670-0006	VERTICAL CAP
38	W490-0073	INNER / OUTER SLEEVE
39	W010-0567	ROOF SUPPORT
40	W170-0063	STORM COLLAR
41	W263-0054	ROOF FLASHING
GD-111 ROOF TERMINAL KIT - 8/12 TO 12/12 PITCH		
37	W670-0006	VERTICAL CAP
38	W490-0073	INNER / OUTER SLEEVE
39	W010-0567	ROOF SUPPORT
40	W170-0063	STORM COLLAR
42	W263-0055	ROOF FLASHING
GD-112 ROOF TERMINAL KIT - FLAT ROOF		
37	W670-0006	VERTICAL CAP
38	W490-0073	INNER / OUTER SLEEVE
39	W010-0567	ROOF SUPPORT
40	W170-0063	STORM COLLAR
43	W263-0056	ROOF FLASHING

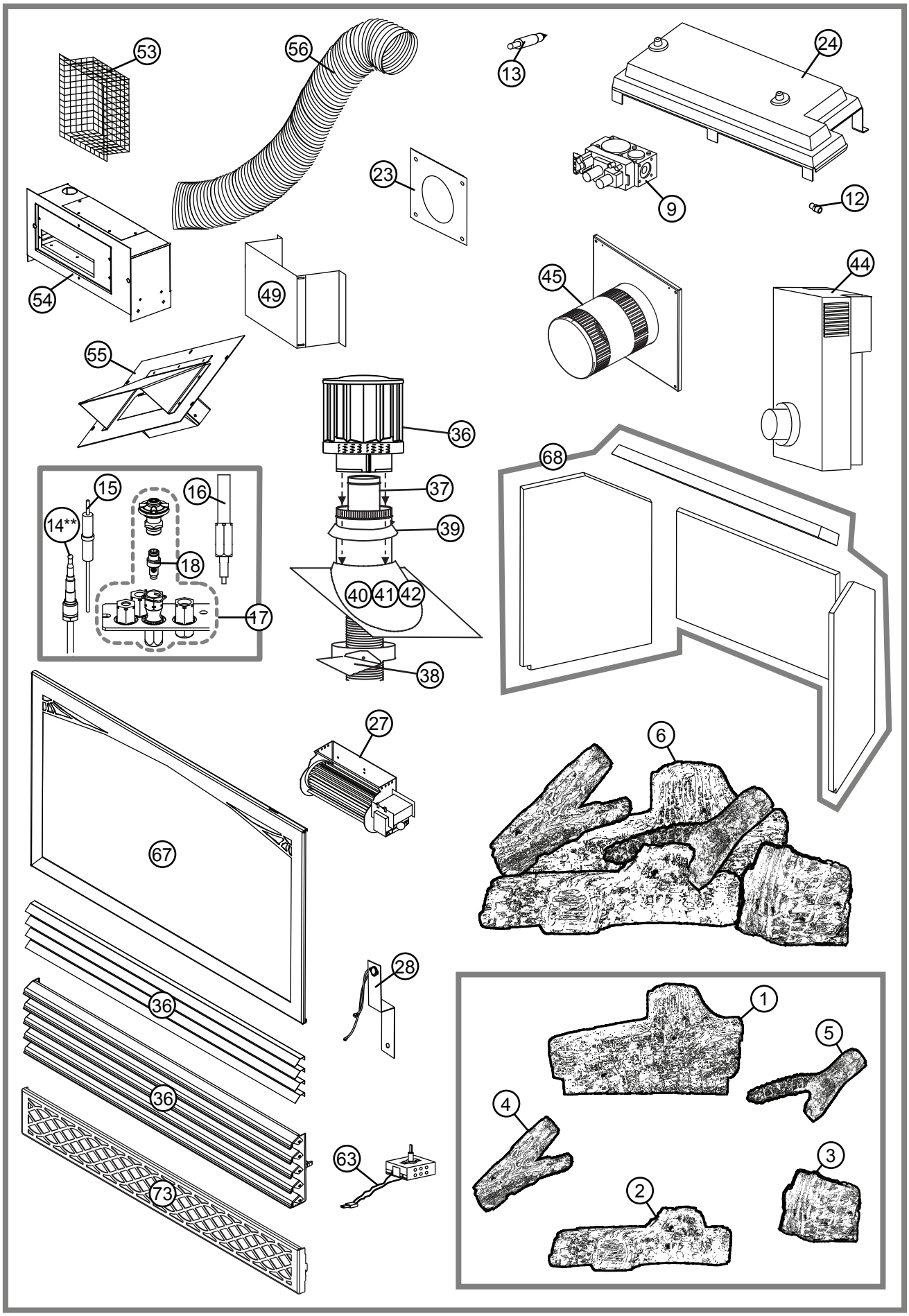
TERMINAL KITS

REF NO.	CDV70	DESCRIPTION
44	GD-201	PERISCOPE
45	GD-222R	WALL TERMINAL KIT

VENT KITS

REF NO.	CDV70	DESCRIPTION
GD-220 (5 FOOT)		
46*	W010-0397	4” FLEXIBLE ALUMINUM LINER C/W SPACERS
47*	W410-0017	7” FLEXIBLE ALUMINUM LINER
48*	W010-0300	4” FLEXIBLE ALUMINUM LINER C/W SPACERS
49*	W410-0018	7” FLEXIBLE ALUMINUM LINER
50*	W010-0370	WALL SUPPORT ASSEMBLY

ACCESSORIES		
REF NO.	**CDV70**	**DESCRIPTION**
51*	W010-1777	FIRESTOP SPACER ASSEMBLY
52*	W500-0103	TERMINAL EXTENSION PLATE
53	GD-301	HEAT GUARD
54	GA-566	HOT AIR DISTRIBUTION KIT
55	GA-72	HOT AIR EXHAUST KIT
56	GA-70	EXTENSION KIT, 5FT FLEX VENT
57*	W010-0370	WALL SUPPORT ASSEMBLY
58*	W175-0001	4” COUPLER
59*	W175-0013	7” COUPLER
60*	W175-0221	CONVERSION KIT - NG TO LP
60*	W175-0222	CONVERSION KIT - LP TO NG
61*	GD825N	MODULATING REGULATOR - NG
61*	GD825P	MODULATING REGULATOR - LP
62	L38AB	LOUVRE KIT - UPPER & LOWER - ANTIQUE BRASS
62	L38PB	LOUVRE KIT - UPPER & LOWER - POLISHED BRASS
62	L38SS	LOUVRE KIT - UPPER & LOWER - STAINLESS STEEL
63	KB-35	VARIABLE SPEED SWITCH
64*	W500-0033	V.S.S. MOUNTING PLATE FOR WALL SWITCH
65*	W660-0081	THERMOSTAT SWITCH
66*	W690-0005	110 VOLT THERMOSTAT - FOR USE WITH GA-566
67	D70K	BLACK DOOR
67	D70G	GOLD PLATED DOOR
67	D70SS	STAINLESS STEEL DOOR
68	GD427-K	BLACK DOOR KIT C/W FACEPLATE
69*	GD799-KT	OLD TOWN RED BRICK KIT
70*	GD804-KT	SANDSTONE BRICK KIT
71*	GD805-KT	HERRINGBONE / SANDSTONE BRICK KIT
72*	PRP70	PORCELAIN REFLECTIVE PANELS BRICK KIT
73	COIK	CONTINENTAL ORNAMENTAL INSETS - BLACK
73*	COISS	CONTINENTAL ORNAMENTAL INSETS - SATIN CHROME
74*	F40	ON/OFF REMOTE
75*	F50	THERMOSTATIC REMOTE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12.0 TROUBLE SHOOTING

⚠ WARNING

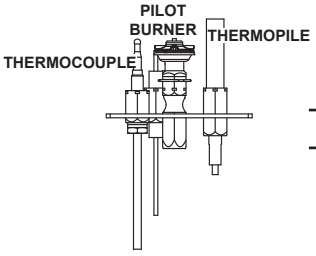
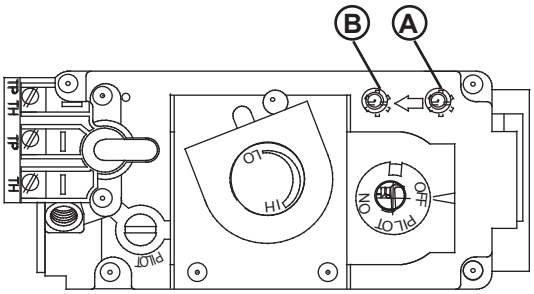
ALWAYS LIGHT THE PILOT WHETHER FOR THE FIRST TIME OR IF THE GAS SUPPLY HAS RAN OUT, WITH THE GLASS DOOR OPEN OR REMOVED.

TURN OFF THE GAS AND ELECTRICAL POWER BEFORE SERVICING THE APPLIANCE.

APPLIANCE MAY BE HOT, DO NOT SERVICE UNTIL APPLIANCE HAS COOLED.

DO NOT USE ABRASIVE CLEANERS.

SYMPTOM	PROBLEM	TEST SOLUTION
Main burner goes out; pilot stays on.	Pilot flame is not large enough or not engulfing the thermopile.	- Turn up the pilot flame. - Replace pilot assembly.
	Thermopile shorting.	- Clean thermopile connection to the valve. Reconnect. - Replace thermopile / valve.
	Remote wall switch wire is too long; too much resistance in the system.	- Shorten wire to correct length or wire gauge.
	Faulty thermostat or switch.	- Replace.
Main burner goes out; pilot goes out.	Refer to “MAIN BURNER GOES OUT; PILOT STAYS ON”	
	Vent is blocked	- Check for vent blockage.
	Vent is re-circulating	- Check joint seals and installation
	Flexible vent has become disconnected from appliance.	- Re-attach to appliance. - Cap was not replaced.
Pilot goes out when the gas knob is released. **The gas valve has an interlock device which will not allow the pilot burner to be lit until the thermocouple has cooled. Allow approximately 60 seconds for the thermocouple to cool.**	System is not correctly purged.	- Purge the gas line.
	Out of propane gas.	- Fill the tank.
	Pilot flame is not large enough.	- Turn up the pilot flame.
	Pilot flame is not engulfing the thermocouple	- Gently twist the pilot head to improve the flame pattern around the thermocouple.
	Thermocouple shorting / faulty.	- Loosen and tighten thermocouple. - Clean thermocouple and valve connection. - Replace thermocouple. - Replace valve.
	Faulty valve.	- Replace.
Pilot burning; no gas to main burner; gas knob is on ‘HI’; wall switch / thermostat is on.	Thermostat or switch is defective	- Connect a jumper wire across the wall switch terminals; if main burner lights, replace switch / thermostat.
	Wall switch wiring is defective.	- Disconnect the switch wires & connect a jumper wire across terminals 1 & 3; if the main burner lights, check the wires for defects and/or replace wires.
	Main burner orifice is plugged.	- Remove stoppage in orifice.
	Faulty valve.	- Replace.
Pilot goes out while standing; Main burner is in ‘OFF’ position.	Gas piping is undersized.	- Turn on all gas appliances and see if pilot flame flutters, diminishes or extinguishes, especially when main burner ignites. Monitor appliance supply working pressure. - Check if supply piping size is to code. Correct all undersized piping.
Main burner flame is a blue, lazy, transparent flame.	Blockage in vent.	- Remove blockage. In really cold conditions, ice buildup may occur on the terminal and should be removed as required.
	Incorrect installation.	- Ensure correct location of storm collars.

SYMPTOM	PROBLEM		TEST SOLUTION
Pilot will not light.  	No spark at pilot burner.	-	Check if pilot can be lit by a match. - Check that the wire is connected to the push button igniter. - Check if the push button igniter needs tightening. - Replace the wire if the wire insulation is broken or frayed. - Replace the electrode if the ceramic insulator is cracked or broken. - Replace the push button ignitor
	Out of propane gas.	-	Fill the tank.
	Spark gap is incorrect.	-	Spark gap should be 0.150” to 0.175” (5/32” to 11/64” approx.) from the electrode tip and the pilot burner. To ensure proper electrode location, tighten securing nut (finger tight plus 1/4 turn).
	No gas at the pilot burner.	-	Check that the manual valve is turned on. - Check the pilot orifice for blockage. - Replace the valve. - Call the gas distributor.
Flames are consistently too large or too small. Carboning occurs.  	Unit is over-fired or underfired.	-	Check pressure readings: - Inlet pressure can be checked by turning screw (A) counter-clockwise 2 or 3 turns and then placing pressure gauge tubing over the test point. Gauge should read 7” (minimum 4.5”) water column for natural gas or 13” (minimum 11”) water column for propane. Check that main burner is operating on ‘HI’. - Outlet pressure can be checked the same as above using screw (B). Gauge should read 3.5” water column for natural gas or 10” water column for propane. Check that main burner is operating on ‘HI’. - AFTER TAKING PRESSURE READINGS, BE SURE TO TURN SCREWS CLOCKWISE FIRMLY TO RESEAL. DO NOT OVER TORQUE. - Leak test with a soap and water solution.
Flames are very aggressive.	Door is ajar.	-	Tighten screws holding door in place.
Carbon is being deposited on glass, logs or combustion chamber surfaces.	Air shutter has become blocked.	-	Ensure air shutter opening is free of lint or other obstructions.
	Flame is impinging on the logs or combustion chamber.	-	Check that the logs are correctly positioned. - Open air shutter to increase the primary air. - Check the input rate: check the manifold pressure and orifice size as specified by the rating plate values. - Check that the door gasketing is not broken or missing and that the seal is tight. - Check that both vent liners are free of holes and well sealed at all joints. - Check that minimum rise per foot has been adhered to for any horizontal venting.
White / grey film forms.	Sulphur from fuel is being deposited on glass, logs or combustion chamber surfaces.	-	Clean the glass with a recommended gas appliance glass cleaner. - DO NOT CLEAN GLASS WHEN HOT. - If deposits are not cleaned off regularly, the glass may become permanently marked.
Exhaust fumes smelled in room, headaches.	Appliance is spilling.	-	Ensure exhaust bracket gasket seal. - Check door seal and relief flap seal. - Check for chimney blockage. - Check that chimney is installed to building code. - Room is in negative pressure; increase fresh air supply. - Check cap gasket on the flue pipe assembly.
Remote wall switch is in ’OFF’ position; main burner comes on when gas knob is turned to ‘ON’ position.	Wall switch is mounted upside down.	-	Reverse.
	Remote wall switch is grounding.	-	Replace.
	Remote wall switch wire is grounding.	-	Check for ground (short); repair ground or replace wire.
	Faulty valve.	-	Replace.

13.0 WARRANTY

CONTINENTAL® products are manufactured under the strict Standard of the world recognized ISO 9001 : 2008 Quality Assurance Certificate.
CONTINENTAL® products are designed with superior components and materials assembled by trained craftsmen who take great pride in their work. The burner and valve assembly are leak and test-fired at a quality test station. The complete heater is again thoroughly inspected by a qualified technician before packaging to ensure that you, the customer, receives the quality product that you expect from CONTINENTAL®.

CONTINENTAL® GAS FIREPLACE PRESIDENT'S LIFETIME LIMITED WARRANTY

The following materials and workmanship in your new CONTINENTAL® gas heater are warranted against defects for as long as you own the heater. This covers: combustion chamber, heat exchanger, stainless steel burner, phazer™ logs and embers, rocks, ceramic glass (thermal breakage only), gold plated parts against tarnishing, porcelainized enameled components and aluminum extrusion trims.*
Electrical (110V and millivolt) components and wearable parts such as blowers, gas valves, thermal switch, switches, wiring, remote controls, ignitor, gasketing, and pilot assembly are covered and CONTINENTAL® will provide replacement parts free of charge during the first year of the limited warranty.*
Any labour related to warranty repair is not covered.
* Construction of models vary. Warranty applies only to components included with your specific heater.

CONDITIONS AND LIMITATIONS

CONTINENTAL® warrants its products against manufacturing defects to the original purchaser only. Registering your warranty is not necessary. Simply provide your proof of purchase along with the model and serial number to make a warranty claim. CONTINENTAL® reserves the right to have its representative inspect any product or part thereof prior to honouring any warranty claim. Provided that the purchase was made through an authorized CONTINENTAL® dealer your heater is subject to the following conditions and limitations:

This factory warranty is non-transferable and may not be extended whatsoever by any of our representatives.

The gas heater must be installed by a licensed, authorized service technician or contractor. Installation must be done in accordance with the installation instructions included with the product and all local and national building and fire codes. This limited warranty does not cover damages caused by misuse, lack of maintenance, accident, alterations, abuse or neglect and parts installed from other manufacturers will nullify this warranty.

This limited warranty further does not cover any scratches, dents, corrosion or discoloring caused by excessive heat, abrasive and chemical cleaners nor chipping on porcelain enamel parts, mechanical breakage of PHAZER™ logs and embers.

CONTINENTAL® warrants its stainless steel burners against defects in workmanship and material for life, subject to the following conditions: During the first 10 years CONTINENTAL® will replace or repair the defective parts at our option free of charge. From 10 years to life, CONTINENTAL® will provide replacement burners at 50% of the current retail price.

In the first year only, this warranty extends to the repair or replacement of warranted parts which are defective in material or workmanship provided that the product has been operated in accordance with the operation instructions and under normal conditions.

After the first year, with respect to this President's Lifetime Limited Warranty, CONTINENTAL® may, at its discretion, fully discharge all obligations with respect to this warranty by refunding to the original warranted purchaser the wholesale price of any warranted but defective part(s).

CONTINENTAL® will not be responsible for installation, labour or any other expenses related to the reinstallation of a warranted part and such expenses are not covered by this warranty.

Notwithstanding any provisions contained in the President's Lifetime Limited Warranty, CONTINENTAL'S responsibility under this warranty is defined as above and it shall not in any event extend to any incidental, consequential or indirect damages.

This warranty defines the obligations and liability of CONTINENTAL® with respect to the CONTINENTAL® gas heater and any other warranties expressed or implied with respect to this product, its components or accessories are excluded.

CONTINENTAL® neither assumes, nor authorizes any third party to assume, on its behalf, any other liabilities with respect to the sale of this product.

CONTINENTAL® will not be responsible for: over-firing, downdrafts, spillage caused by environmental conditions such as rooftops, buildings, nearby trees, hills, mountains, inadequate vents or ventilation, excessive venting configurations, insufficient makeup air, or negative air pressures which may or may not be caused by mechanical systems such as exhaust fans, furnaces, clothes dryers, etc.

Any damages to heater, combustion chamber, heat exchanger, brass trim or other components due to water, weather damage, long periods of dampness, condensation, damaging chemicals or cleaners will not be the responsibility of CONTINENTAL®.

ALL SPECIFICATIONS AND DESIGNS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE DUT TO ON-GOING PRODUCT IMPROVEMENTS. CONTINENTAL® IS A REGISTERED TRADEMARK OF WOLF STEEL LTD. PATENTS U.S. 5.303.693.801 - CAN. 2.073.411, 2.082.915 © WOLF STEEL LTD.

14.0 SERVICE HISTORY

Appliance Service History

This heater must be serviced annually depending on usage.

Date	Dealer Name	Service Technician Name	Service Performed	Special Concerns

15.0 NOTES

44.1